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GROUNDWORK OF ECONOMICS

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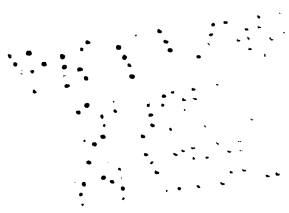
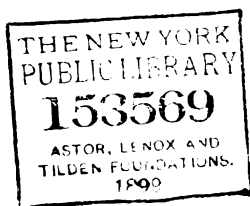
GROUNDWORK
OF
ECONOMICS

BY
C. S. DEVAS

LONDON
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1883

Tempus



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PREFACE.

IT is time that something was done in England, either to restore the declining credit of what is known as Political Economy, or to replace that enfeebled body of doctrine by a worthier successor. Our grandfathers exulted in Political Economy as a grand and beneficent science, not the least among the glories of their age; our fathers respected it; and little more than twenty years ago it successfully withstood all the sharpness of Mr. Ruskin's reasoning and raillery. But times have changed; there are men of intelligence who are beginning to suspect, that much of this science is but a collection, partly of useless discussions and idle declamation, partly of truisms, partly of untruths; while the anarchy among recent economists on the very foundation and first principles of their science, as any one may see in Mr. Dillon's recent work on *The Dismal Science*, is a matter not of suspicion, but of certainty. Nor can we rest tranquil in the consoling thought, that if Political Economy is a mistake, the more its teachers fall out among themselves and fall into disrepute with the public, the better. For there are many students who make indeed an excellent spring out of the frying-pan of the Political Economists, but only to tumble into the fire of the Sociologists or Socialists. There will be frequent occasion in the following pages to speak of these two schools; it is enough here to observe that what is commonly understood by the word Sociology, although dangerous to society and defiant of logic, has many adherents among

the literary classes ; and that Socialism has at last found in the English tongue a popular exponent ; for the fame which cannot be suppressed, and the sale which cannot be restrained, of Mr. George's work on *Progress and Poverty*, shew the day is over when we could meet the Socialists with silence, or ridicule, or vituperation.

There is thus an urgent need of putting before our countrymen the true doctrine on economical matters ; and this book is meant to be a contribution towards this end. I do not profess to have solved every problem ; I only hope to have taken the right view of economical science, and to have followed the right method. What this view should be, and this method, are fully treated in the first and second chapters of the Introduction. In these and in other chapters I have also, on occasion, examined at length some leading errors ; but, although destructive criticism, like that of Mr. Dillon, is useful, the main business of our own times and of this work is construction. Thus I have endeavoured in a rude and imperfect manner, but I hope with sound materials and on a solid foundation, to construct a building that may serve for a time till a better architect shall raise a worthy temple of economical science.

This volume, which is the foundation of whatever is to follow, is complete in itself ; and is divided for purposes of reference into short sections numbered without break from the beginning to the end.

In citing the Blue Books I use the general term *Parliamentary Papers*, and give the year, the volume of that year, and generally the MS. page of the volume ; not the printed page of each separate Report in each volume. This method of citation seems simplest for those who have no private collection of these most ponderous and chaotic sources of information, but use them in the library of the British Museum in London.

The references to Aristotle's *Politics* are to the edition of Dr. F. Susemihl, Leipzig, 1879. The figure in brackets gives

the traditional as distinct from the reformed number of the particular book of the Politics.

Mr. Bevan's two useful volumes on *British Manufacturing Industries* are not distinguished except in their secondary titles. I have therefore called the one published in 1875 Volume I., and the other published a year later, and treating among other things of the textile industries, Volume II.

Whenever in the citations from Adam Smith's *Wealth of Nations* pages are given, they are those of MacCulloch's edition published at Edinburgh in 1863.

September, 1883.

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GROUNDWORK OF ECONOMICS.

INTRODUCTION.

CHAPTER I.

DEFINITION AND PROVINCE OF ECONOMICS.

Nature, Definition, and Name of the Science, § 1-3—Relation of Economical Science to the Arts and to Physical Science, § 4, 5—Errors on the Definition and Province of the Science, § 6-10—Arrangement of the Subject-matter, § 11.

§ 1. Economical science is a portion of Ethics, or moral science. By *a science* is meant a series of truths or the knowledge of them; not indeed of any truths in any order, but concerning a definite subject-matter in its dependence upon principles (*cognitio rerum in suis principiis*). By moral science or *Ethics* is meant the science of *natural* morality, that is, of human action in the natural order, as far as this action is right or wrong, directed or not directed to the attainment of man's end; whereas action in the *supernatural* order properly belongs not to moral science, but to moral theology. Moral science can be conveniently divided into two parts, the first regarding man in his individual capacity, the second regarding him in his relations to his fellow-men. The *first* of these parts has no special and recognised name, but is called Ethics in the narrow or proper sense, and shews the general principles of all moral action, as the motives to act, the difference of right and wrong, our knowledge of the

B

difference, our capacity to choose, God's command that we do rightly, our means of obeying, and the help or hindrance coming from our nature and our acquired dispositions ; moreover it shews in particular those of our duties towards God which do not directly concern our fellow-men. The *second* part of moral science, regarding the moral action of man in society, can be called *social science*, and can itself be conveniently subdivided, according to the two main temporal ends binding men together, into two parts : political science, or *Politics* shewing the moral action of men as associated for the determination and protection of the order of justice or natural rights ; and economical science, or *Economics*, shewing the moral action of men as associated for sustaining and continuing their life on earth. Political science can be conveniently divided into three parts ; first, Public Law (including 'Comparative Politics') regarding the society itself, namely, the State, which has the determination and enforcement of the order of justice as its end ; secondly, Private Law (including 'Comparative Jurisprudence') regarding this determination and enforcement as actually realised within the State ; thirdly, International Law or the Law of Nations regarding the relations of States to one another. It is not my task to defend this view and partition of political science, but to keep to economical science, which, since it looks on men as associated for preserving, making happy, and transmitting their existence, has for its subject-matter what in popular language is called industrial, social, and family life.

§ 2. It is not an unimportant matter to fix on suitable divisions of moral science, and to call them by suitable names. Otherwise there is greater difficulty in study and greater risk of error. Unless indeed a science is new, new terms, though otherwise better, may be worse because of their novelty ; for this is likely to make the science itself seem a novelty. And since moral science, of which Economics form one part, is very ancient, it is well to depart as little as possible from the traditional terms of the Peripatetic and Christian philosophy. Let us therefore speak of the ethical, political, and economical sciences, or of Ethics, Politics, and Economics, as the three great divisions of moral philosophy or of Ethics in the

wide sense. The two last of the divisions can often be reunited with convenience, and the most suitable term for the combination seems to me to be social science ; though if people prefer the term sociology or, again, social philosophy, we need not quarrel with them.* But we must be more rigorous in our use of the terms Politics and Economics. If put side by side they express well enough the sciences of human action in the two great departments of union among men ; for the city (πόλις) is a visible sign of the union for order and justice ; the house (οἶκος) of the union for the sustenance and continuance of mankind. But if, as Aristotle sometimes, we make Politics include the whole of social science,† there is danger lest, like him, we exalt overmuch the office of the Civil Power, and look on man as made for the State, not the State for man. Thus some of those German Economists known as Professorial Socialists, in their blind worship of what they call the Civilized State (*Kulturstaat*), seem to forget the immense importance and sacred

* Some continental writers use the term *Jus naturae* for social science. See M. Liberatore, *Institutiones philosophicae*, vol. iii. Introd. Art. ii., on the distinction between *Ethica* (or *scientia moralis* in the narrow sense) and *Jus naturae*. He himself adopts another use of the terms, whereby *Ethica* regards human nature in the abstract, as it must be to be right, while *Jus naturae* regards concrete duties and rights. The main practical difference is that those of our duties which do not directly concern our fellow-men, will on his plan be joined with our social duties and fall under *Jus naturae*, whereas, on the other plan, they are separated from the social duties and fall under *Ethica*. A third division of moral philosophy places under Ethics not merely (as I have done) the duties which a man in solitude owes to God, but also such of the social duties to which there are no corresponding human rights, and which are called *officia caritatis*, such as almsgiving or parental love ; while *Jus naturae* (*Rechtsphilosophie*) is confined to natural rights and the corresponding duties (see Stöckl, *Lehrbuch der Philosophie*, 2nd edit. § 2, 178). The inconvenience of having to distinguish Ethics (or moral philosophy) in the wide and in the narrow sense, would be avoided if we could adopt for the narrow sense the term Monastics, as is done for example by Sylvester Maurus : tres sunt partes Philosophiae moralis ; monastica nimirum, seu solitaria ; Oeconomica, seu familiaris, et Politica, seu Civilis. (*Aristotelis Opera paraphrasi illustrata*, tom. ii. Proemium. Romae, 1678.)

† See D. P. Chase, *Nicom. Ethics*, pp. 2 and 175 (3rd ed.), on the senses of the term πολιτική.

rights of family life ; * an error less likely to prevail if Economics and Politics are placed on a level as two separate sciences. Only mark that separate does not mean unconnected, and the intimate connection of the two sciences will appear unmistakable as we proceed.

§ 3. The term Political Economy† is evidently unsuitable if the view given above of the distinction of Politics and Economics is correct ; for this distinction is obscured by such a term ; which, therefore, in spite of its prevalent use in England and France, I think ought to be discarded, or only used for one department of Politics, namely, concerning the revenue and expenditure of both central and local government‡, while the corresponding term economical policy might be used for the department of Economics concerning the action of the State on domestic and industrial matters.§ But notice that it would be of little consequence if both these departments were included under Politics, or again both under Economics ; since it is of little consequence where the exact frontier between these two sciences is fixed as long as we recognise that one is not subordinate to the other, and that both are subordinate to Ethics.||

* So Adolf Held, *Sozialisms*, 1878, p. 123 : Es giebt für mich keine von der Staatswissenschaft abgetrennte Sozialwissenschaft oder Nationalökonomie. An author of a very different class, Sir G. Cornewall Lewis, *Methods of Observation and Reasoning in Politics*, chap. ii. § 9, makes Politics mean nothing else than social science, as he expressly avows.

† On this term, used as early as 1615 by Montchrétien, and on various others, see Wilhelm Roscher, *Nationalökonomie*, § 16, note 1 (10th edit.). The Babel of terms in economical science, as well as in other and higher branches of philosophy, is a just retribution for the desertion of the Scholastic terminology.

‡ Whately goes too far in saying (*Lectures on Polit. Economy*, 4th ed. p. 2) that, interpreted according to its etymology, Political Economy implies almost a contradiction. *Oikos* means property as well as house.

§ The more correct forms would be respectively political Economics and economical Politics. The Germans might use for these departments respectively Staatswirthschaftslehre and Wirthschaftspolitik ; though with them, as elsewhere, is verbal anarchy. See Roscher, *Nationalök.* § 17 ; Schäffle, *Das gesellschaftlichen System der menschlichen Wirthschaft*, 3rd edit. § 21 and 276. This work of Schäffle is known, and shall henceforth be cited by the shorter title of *Nationalökonomie*.

|| The term Political Economy is not mended by being employed (as by Say and Cibrario) to mean the science of society in general. If any

Instead of Political Economy the Germans commonly use the term National Economy (*Nationalökonomie* or *Volks-wirtschaft*), in its way no less misleading ; for though the diversities of different nations are very great, and may require very different institutions both political and economical, nevertheless there is the same moral law for all, the same groundwork of mental and bodily qualities, and in many points the same physical constitution of the external world. Later on we shall see the connection of this term National Economy with the errors of a school of German economists (*inf.* § 26).

Other names for Economics being less in use need less attention. The prefix of Social is superfluous ; of Civil or Public liable to the objections against Political ; while terms like Plutology or the Science of Wealth, and Catallactics or the Science of Exchanges, are inadmissible, as the latter puts one part for the whole, and is thus inadequate ; the former puts wealth as the subject-matter instead of human action, and is thus inapplicable.

§ 4. But while names and divisions are matters of convenience, it is a matter of necessity, if error is to be avoided, to make economical science a portion of Ethics, and to distinguish it, as being a science, from the various arts which are subordinate to it. It is the science, as we have seen (§ 1), of moral action in certain relations. It has in common with the arts that its object is action ; it differs from them in regarding action as leading or not leading to the end of man, whereas they regard it as leading or not leading to some particular end.* For example, the art of husbandry will tell us the various methods of growing crops : economical science will tell us what is right regarding the reward of the husbandmen. Again, the art of coal-mining will tell us how to raise coal at the least cost in money : economical science, how to regulate the conditions of labour so that the miners may best fulfil the purpose of their life. In

one were to give the name of zoological botany to a treatise on plants, we should not mend the title by applying it to a treatise on both botany and zoology.

* The foundation of this view of science and the arts will be found in Appendix A at the end of this volume.

like manner political science differs, as being a science from the arts in subordination to it. Thus the military art will teach us how to establish the most efficient army: political science, what is right as regards peace or war: the art of rhetoric, how to move an assembly: political science, how to direct our eloquence for the true welfare of our country.

We can now easily see the relation between the various arts and Economics. All the arts relating to the house, the workshop, and the playground are a matter of concern for Economics; for in order to ascertain what ought to be, we must know what can be and what must be. No sharp line can be drawn excluding the rules of the arts, that is, what are called technical details, from the consideration of economists. We must explain the rules which from their universality, or frequency, or some other reason, are important for some consideration of morality: and stop when the details become unimportant for this purpose. Whence it follows that economical science has to give to some arts more consideration than to others, treating, for example, more in detail the art of banking than that of shipbuilding, or again the various arts of husbandry more in detail than soap-boiling or machine-making. In the same way political science must pay more attention to the details of judicial procedure than to those of the military art. And let this much suffice on the relation of Economics to the Arts.

Turning to the physical sciences we can say in like manner, that such of their results as are of little moment for Economics are to be passed by; for example, most of the results of Astronomy, while others from their importance for the purpose in hand need corresponding attention; for examples the transmission of hereditary qualities from parents to children, or the effects of enjoyment on mind and body. Such results or laws of physical science are not indeed the object of Economics, but a knowledge of them, as is plain, is in many cases requisite to the apprehension of right action.

§ 5. Moreover, economical science has not only to appropriate many results of physical science and of the arts, but before its own proper object, namely, the apprehension of right action, can be reached, it has a preliminary work, that may be of no small extent. It has to ascertain

what under given circumstances it is probable that men will actually do for the support, continuance, and amusement of their life—how the hearth and homestead, the workshop and playground, are likely to be constituted—and the degree of probability. For to find out what is right we may often have first to find out what is probable. And this is no easy task. For not merely have we to look at the inhabitants of a given province or country at a given time, but to compare one province and one country with another, and past conditions with present: so as to pronounce what is probable under certain circumstances and not under others, and how probable, and whether the changes are in one direction or several, whether old conditions never again return, or seldom or often, and so forth.

The immense field open here for observation and research is evident, and how as human action is continually going on there is a continuous source of fresh conclusions. And therefore, whereas the first part of Ethics is complete, and the whole body of truth as far as man can apprehend has been attained (or nearly so), the second part, comprising Politics and Economics, is incomplete and will keep growing as long as new combinations of circumstances keep coming, and the greater the changes the more will be the fresh matter amid which to search for what is right. And people may even fancy there is a new science, though there is really only fresh matter for the old one, as when the discovery of new seas and continents enlarges the field for the zoologist, but does not make a new science distinct from zoology.

Whether the term *economical laws* should be given to the results of this preliminary enquiry into one department of human action, let others discuss. Here let us rather notice the difference between them and what are called physical laws. These prevail, where there is no miracle, without exception; whereas the so-called economical laws are merely the statement of probabilities of action on the part of free agents and imply no iron necessity. Thus the 'law' that in modern England, if trade is very flourishing and bread is very cheap, marriages will be more numerous than usual, or that in modern Europe the price of provisions will rise in a besieged town, does not mean that a certain additional

number of persons cannot help marrying, or that the provision dealers cannot help raising their prices ; but simply that there are more inducements or less obstacles in the one case to marry, in the other to raise prices, both being perfectly free and deliberate actions for which the agents are responsible.* Similarly, to take an example from Politics, if sheepstealing be a capital offence in a country where public opinion is both influential and opposed to such severity, there is the double probability that the law will be slackly enforced, and that the offence in consequence will be frequent. But there is no compulsion or necessity to steal sheep or acquit sheepstealers. Nor is it the slightest sign of necessity as opposed to free-will, that actions like those spoken of can be reduced to statistics, and shew great uniformity even in details. For men's actions being in time and space are obviously capable of numeration and thus a subject of statistics ; men's nature being the same, they are likely to act in the same way under the same circumstances ; and though this especially applies where no motive of duty intervenes, it is seen also in deliberate offences, which are almost certain to increase or diminish according as the temptation is greater or less, as the increase of drunkenness on a London holiday, the decrease of vice in the Royal Navy in recent years, the contrast as regards piety and the domestic virtues between the Irish in their native villages and the Irish of the English towns.†

Since, then, there is such a radical difference between economical probabilities and physical laws, we must distinguish them, unless deliberately aiming at confusion ; and thus if we call the former economical laws, we must refuse

* For the German literature on this subject, I can refer to Roscher, *Nationalökonomie*, § 13, and to Adolf Wagner, *Volkswirtschaftslehre*, i. pp. 195-6, note. Roscher seems to state what is true, but as usual in misleading language, clear philosophical notions and accurate terminology being among his weakest points. Wagner is much clearer, and honourably confesses his former errors on the subject.

† Those who care for an exposure of Buckle's folly and impertinence on these questions, can find it in the *Edinburgh Review*, April, 1858, and the *Rambler*, vol. x. (1858), from which some of the remarks in the text are taken. How far Mill can escape a similar charge (*see his Logic*, bk. vi. ch. xi.), I leave to others to judge.

this title to that body of physical laws which are of great weight in Economic (as the laws of human exhaustion or of reproduction), and which might naturally claim it. Or if we speak of these as economical laws, then we must refuse the title to the probabilities of human action.

§ 6. And now let us glance at certain mistaken views on the definition and province of economics. Some writers, whether giving or refusing it the title of a science, will in fact reduce it to a mere art, namely, to the art of getting and keeping wealth, or national wealth. So Mr. Jevons says (*Theory of Political Economy*, p. 40, 2nd ed.): "To satisfy our wants to the utmost with the least effort—to procure the greatest amount of what is desirable at the expense of the least that is undesirable—in other words, *to maximise pleasure*, is the problem of Economics." And Mr. Bonamy Price tells us (*Principles of Currency*, lect. 1), that Political Economy is 'not final,' its teachings have to be 'combined with the injunctions of other sciences,' its conclusions 'may be overridden, modified, or rejected.' And in a more recent work (*Chapters on Practical Political Economy*) he disclaims a scientific treatment of economical questions.

Now I do not ask any one to refrain from treating of the art of wealth; though I may privately suspect that unless broken into a number of particular and local arts (as iron-melting in South Wales, coffee-planting in Ceylon, sheep-farming in Australia), the treatment would fill countless volumes and surpass the capacity of any single man to expound. But in the name of reason I do ask the exponents of this art to refrain from giving to it the name of Political Economy or of Economics, but to remember the distinction drawn so long ago by Aristotle between the science of good home life (οἰκονομική) and the art of acquiring wealth (χρηματιστική),* and to use this name Chrematistics or some

* Aristotle, *Polit.* I. c. 3, § 2, urges this (οὐκ ἡ αὐτὴ τῇ οἰκονομικῇ ἢ χρηματιστικῇ); for the one has to supply, the other to use (τῆς μὲν γὰρ τὸ πορίσασθαι, τῆς δὲ τὸ χρῆσασθαι). The end of Economics (*ibid.* § 8 and 9) is not the boundless accumulation of wealth, which is but an instrument (ὁ δὲ πλοῦτος ὀργάνων πλήθός ἐστιν οἰκονομικῶν καὶ πολιτικῶν): not any amount of wealth is wanted, but only what is necessary and useful for social life, (θησαυρισμός χρημάτων πρὸς ζωὴν ἀναγκαίων καὶ χρησίμων εἰς κοινωνίαν πόλεως ἢ οἰκίας. . . ἢ γὰρ τῆς τοιαύτης κτήσεως αὐτάρκεια πρὸς

other as suitable, instead of misleading us with ambiguities. And I ask further that they neither speak of their art as a science, nor treat it as such, taking heed that the conclusions of science are truths, and that truths are not to be overridden or rejected.

§ 7. Cairnes (*The Character and Logical Method of Political Economy*, 2nd. ed. p. 57) defines Political Economy as the science which, accepting as ultimate facts the principles of human nature and the physical laws of the external world, as well as the conditions, political and social, of the several communities of men, investigates the laws, the production and distribution of wealth which result from their combined operation.* The science, he says (*ibid.* p. 8 *seq.*), has wealth for its subject-matter ; it is a mistake to try and combine the laws of wealth and the laws, or a portion of the

ἀγαθὴν ζωὴν οὐκ ἀπειρός ἐστιν). Those are in error (*ibid.* § 18, 19) who think the end of Economics is to preserve, or rather to increase indefinitely the stock of money ; the cause of their error being their eagerness for life instead of for a good life (τὸ σπουδάζειν περὶ τὸ ζῆν, ἀλλὰ μὴ τὸ εὖ ζῆν). Similarly St. Thomas, *Summa*, 2^a, 2^{ae}, qu. 50, art 3.

* The words from 'as well' to 'of men' are an addition to the definition as it stood in the first edition (p. 10). He gives as a slightly wider definition, "the science which traces the phenomena of the production and distribution of wealth up to their causes in the principles of human nature, and the laws and events [physical, political, and social, 2nd edit.] of the external world." Senior, *Four Introductory Lectures on Polit. Econ.* 1857, p. 36, gives :—The science which states the laws regulating the production and distribution of wealth, as far as they depend on the action of the human mind. Mill gives much the same as a correct practical definition in his *Essays on some Unsettled Questions of Polit. Econ.* p. 133 (2nd edit.), but as a strict scientific definition (*ibid.* p. 140) : "The science which traces the laws of such of the phenomena of society as arise from the combined operations of mankind for the production of wealth, in so far as those phenomena are not modified by the pursuit of any other object." The special objections to such a view will best be made when we are discussing method (*see infra*, § 14, 15). In the passages at the beginning and end of Mill's Preliminary Remarks in his *Principles of Polit. Econ.* (6th ed.), his view seems to have grown like that of Cairnes. The contention of Cairnes (*Character and Logical Method of Pol. Ec.*, p. 27 *seq.*) against Senior and Mill, that Political Economy is not a purely mental science, but mixed physical and mental, (*see* Mill, *Unsettled Questions*, p. 129 *seq.*) shews, like the modern controversy, whether it is or is not a mathematical science (*see inf.* § 24), that the modern anarchy as to words and notions is not confined to Economics.

laws, of the moral and social nature of man, like the mistake of the Greeks, introducing moral considerations into their physical science. He warns us also (*Essays on Polit. Econ.* pp. 322-3, pp. 252-261) not to confound questions of Fact and Right, of Science and Morality, nor even to combine them, lest we fall into the constant temptation to ignore or to overrate facts, to sacrifice the scientific solution to the moral, or the moral to the scientific. Similarly Mill (*Unsettled Questions of Polit. Econ.* Essay V.; *Logic*, Bk. VI. ch. xii.); and Senior (*Introduct. Lectures on Pol. Econ.* Lect. ii. and iii.), distinguishing science and art, make morality an art and Political Economy a science, thus looking only to phenomena and their laws.

Against Cairnes can be urged that he is mistaken in separating the 'laws of wealth' and the 'laws of the social nature of man.' If indeed by the former phrase he meant the sum of the results of physical science in regard to the objects composing wealth, the separation would be just. But he means by it the 'laws' of the action in regard to wealth of men on the external world and of the external world on men; and in this sense they are inseparably connected with the social nature of man, and are not distinct from, but form a department of social science. For if there is a science of the action of man in society, and if the pursuit of wealth is carried on not in singleness and solitude, but in society, that pursuit must plainly form part of the subject-matter of that science.*

Graver is the error of Mill and Senior, shared by Cairnes and many others, separating Economics from Ethics. The root of this is in the denial, or ignorance, or forgetfulness that morality (*ens morale*) can be the object of a science, and that there is an ordered body of truth concerning right and wrong which can be known as well as the truths concerning the plants or the stars. It is a mistake therefore to think that, whenever we speak of what ought to be,

* Auguste Comte and his follower Mr. Ingram (*Address on Political Economy*, 1878, pp. 11-16) are quite right in blaming the attempt to isolate the study of the facts of wealth from that of the other social phenomena. But whether the reasons they give are all right or all original, is another matter.

we are engaged in an art and not in a science ; and it is a wrong conclusion that because 'Political Economy' is a science, it is not concerned with what ought to be, is distinct from Morality, and is to be called, as Mill says, a mental science, or, as Cairnes says, a mixed mental and physical science. In reality there can be a science of morality, and it is precisely to this science, as one department of it, that Economics belong.

§ 8. But while true philosophy forbids us to look on morality after the manner of Cairnes and Mill, it is permissible to separate a portion of what I have called the preliminary parts of economical science, and to give to the various possibilities and probabilities of human action as to wealth (Cairnes would, I think, add the exposition of many physical laws) the name of Political Economy or any other name, and to pay no regard to what ought to be. This position, like that of those who make Political Economy the art of national wealth, is at least intelligible and logical ; but singularity inconvenient, separating premises and conclusion, and breaking off at the very point of interest, when all the materials for judgment have been collected. And this inconvenience can be gathered from the practice of economists in defiance of their theory. Thus Mill in his *Political Economy* sets at nought the distinction of science and art which he made in his *Unsettled Questions* and his *Logic*, and treats again and again of what ought to be.* Wilhelm Roscher, the celebrated leader of the historical school of economists in Germany, first makes a great point that his method (he means his view) of Political Economy, which he calls 'the (realistic) physiological or historical method,' looks to *what is* (what has been, how it has become so, etc.), not to what ought to be (*Nationalökonomie*, § 22), and yet repeatedly in the course of his work discusses what ought to be. Senior (*Four Introductory Lectures on Polit. Econ.*, pp. 41-46) complains that almost all economists except Turgot and Ricardo treat their subject as an art, though most English

* Especially in Books ii. and v. Nor can he escape the charge of inconsistency by adding to the title of his book 'Principles of Political Economy' the words, 'with some of their applications to social philosophy.' For philosophy is concerned with sciences not with arts.

economists define it as a science ; but Senior himself is charged by Mr. Hearn (*Plutology*, Introduction) with frequent divergences into practical applications of his theory. Yet even Mr. Hearn cannot always keep true to his inconvenient arrangement, and towards the end of his *Plutology* (ch. xxii. § 3 and 4) treats of the duties of the State and the limits of its intervention ; in other words, of what ought to be, or of morality.*

In answer to Cairnes' fear of our straining morality or facts, it can be said that this is a danger of all ethical study, and would not be avoided by stopping short before discussing what was right or wrong, as though reasoners could not see the conclusions of their doctrines ; for example, as though Ricardo did not know that his economical doctrines were a weapon of attack against the landed gentry, and did not mean them to be so used.†

§ 8a. Finally, when Roscher (*l.c.* § 23 *seq.*) urges the diversities of views as to what is desirable, or what ought to be, in Politics and Economics, and calls the search after this the idealistic as opposed to the realistic method, I answer in two ways. First, the alleged diversity is by no means so great as imagined by the narrow-minded, but is often merely the difference in the matter which is subject to the same moral principles, as according to circumstances similar actions may have an entirely different moral character (*vide inf.* § 12). Nor do Roscher's scoffs at 'ideals,' that to be true they must vary with every national peculiarity, and must come out in a new and corrected edition every few years (*l.c.* § 25), hit the view I have taken of Economics, since it is not the eternal moral truths that change, but only the field (or, more truly, only one part of the field) of their action ; and these changes can be examined no less than other historical changes, and to examine them is precisely one of the main tasks of Politics and Economics. Secondly, the diversity, as far as it exists, can be explained, and the

* He seems to be among those who ignore the distinction between an art and moral science ; and he misleads us by repeating Bacon's warning not to turn aside to practice, like Atalanta after the golden apple ; as though practice were the same as morality.

† See Adolf Held, *Sozialismus, Sozialdemokratie und Sozialpolitik*, p. 49 *seq.*

danger of error lessened by the explanation. The same objection might be raised, if not against all philosophy, at least against all moral philosophy. No doubt there is diversity of opinion, but no doubt also that the main reason for it is this—that the intellect in these matters is a follower and dependant of the will, and that the main safeguard or remedy is therefore in uprightness of will. Long ago Plato marked the moral blindness caused by self-love; long ago Aristotle taught that those who were led by passion were unfit for ethical studies;* and a master of wisdom and language has in our own day reiterated this fundamental truth. Cardinal Newman, speaking of Pascal and Montaigne, says (*Grammar of Assent*, p. 304, 3rd edit.): “Here are two celebrated writers in direct opposition to each other in their fundamental view of truth and duty. Shall we say that there is no such thing as truth and error, but that anything is truth to a man which he troweth? and not rather, as the solution of a great mystery, that truth there is, and attainable it is, but that its rays stream in upon us through the medium of our moral as well as of our intellectual being; and that in consequence that perception of its first principles which is natural to us is enfeebled, obstructed, perverted, by allurements of sense and the supremacy of self, and, on the other hand, quickened by aspirations after the supernatural; so that at length two characters of mind are brought out into shape, and two standards and systems of thought,—each logical, yet contradictory of each other, and only not antagonistic because they have no common ground on which they can conflict.” Light then and truth there is in moral science, and in Economics as one part of it, for those who will, and by no means only fanciful ideals and idle unrealities; nor am I writing for those whose philosophy rests on a blind belief in arbitrary assumptions and a blind denial of the first principles of reason and morality.

§ 9. The Italian Luigi Cossa, whose views are worthy of attention, if for no other reason, for his great acquaintance with economical literature, expresses gladness that Senior,

* Plato, *De leg.* V. pp. 731E–732A. Aristot. *Ethica Nicom.* l. x. c. 10 (9).

Mill, and Cairnes have not been true to their strict separation of economical science and the art of government: a happy fault to which we owe many fine applications of economical theories (*Guida allo studio dell' Economia Politica*, pp. 9-12); and he thinks that from the definition of Political Economy springs its double office or function, namely, first as a science which, looking at the causes and laws of economical phenomena, and secondly an art, which from economical laws deduces guiding principles for public and private action (*ibid.* p. 9). And he defines Political Economy as "the science of the social order of wealth, the science namely that studies the general laws of this order so as to deduce therefrom guiding principles for the good government of public and private life. That is to say, in other words, Political Economy is concerned with the social phenomena occasioned by wealth, with the double aim of examining their first causes and their relations with public and private prosperity" (*ibid.* pp. 4-5).* He thinks that Political Economy is one among a number of economical disciplines, having wealth as their common object (whence they are called economical), and each studying it from a different aspect; that Political Economy has as its province not physical laws, technical processes, and merely individual and domestic relations, but general laws and social relations (*ibid.* pp. 4-6), 27); that it is quite distinct from Ethics (*morale*), though in its applied part subordinate thereto (*ibid.* pp. 28-31.)

But even Cossa seems involved in obscurity and contradiction. Senior, Mill, and Cairnes, though inconsistent in practice, are at least consistent in their theory, separating 'Political Economy' from Ethics, but he by his definition makes it a part of Ethics (for what else is a science giving principles for the good government of public and private

* "*L'economia politica . . . è la scienza dell' ordine sociale delle ricchezze, quella cioè che ne studia le leggi generali, per poi dedurne dei principii direttivi pel buon governo delle aziende pubbliche e private. Il che vuol dire, in altre parole, che l'economia politica si occupa dei fenomeni sociali cui dà luogo la ricchezza, col duplice scopo di investigarne le cause prime e di considerarne i rapporti colla prosperità pubblica e privata.*"

life?), and then declares it not to be a part; misled, it seems, like many others by confusion on 'science' and 'art'; not seeing that truths as to right action can be the object of science as well as any other truths, and cannot be 'subordinate' like the rules of any art, which tell the way to a particular end, but which a higher end may forbid us to follow. And, secondly (not to speak of his making wealth the object of economical science when really its object is one department of morality), he introduces a misleading distinction between social and domestic relations (*rapporti sociali* and *famigliari*), between Political Economy (as defined above) and Domestic Economy, "which studies the fact of wealth in its relations to the family, seeking the best means of managing the family property in the interest of the members" (*ibid.* p. 5); as though the family were not pre-eminently a 'social relation,' and as though many of the relations of wealth to the family, for example, the laws and customs of inheritance, the powers of the paterfamilias over the property, or the conditions of domestic industries, were not precisely some of the most important portions of "the social order of wealth," and "the good government of public and private life." There is, of course, an *art* of housekeeping (comprising cooking, marketing, washing, dusting, nursing, &c., or the superintendence of these) which may be called, if it is thought fit, Domestic Economy; and, again, we may with Cossa (*ibid.* pp. 5, 6), give the name 'Industrial Economy,' or 'Technology in the widest sense,' to the application of the physical and mathematical sciences for teaching the most profitable way of working in the various industries; we may even, as he notices is sometimes done, include both Domestic and Industrial Economy under the generic term, 'Private Economy' (*economia privata*, *Privatökonomik*), though the term is badly chosen, and had much better be 'the economical arts': if only we remember that these various terms are merely arts or collections of arts, quite distinct from economical science, which uses them as we have seen (§ 4) in its own way for its own ends.

§ 10. The definition of Political Economy as "the science which regulates the production, distribution, and consump-

tion of wealth," not to speak of other objections, would include the physical sciences on which the economical arts are based; and Mill (*Unsettled Questions of Polit. Econ.*, Essay V.) has long ago shewn its faultiness.

To define it, like Mr. Macleod (*Contemporary Review*, May, 1875, p. 893), as the science which treats of the laws which govern exchangeable quantities, or the science of exchanges or of values (so also Whately), is an arbitrary limitation, as though I were to say Economics related only to agriculturists, and had nothing to do with the morality of trade and manufactures.

Arbitrary also is the view that makes labour the object of Political Economy (Dunoyer), for then we should have to exclude the great and important department on the enjoyment of wealth, while on the other hand, we should have to include, if not a great part of Physiology, at least a great part of Politics, as the labour of the civil and military services, of the clerical, medical, legal, and other callings, would have to be considered no less than that of the agricultural, commercial, and manufacturing classes.

Another opinion, which is growing more common, and has a delusive similarity to the truth, makes 'Political Economy' a portion of Social Science, or 'Sociology,' having as its subject-matter one portion of the subject-matter of that wider science. So far I see none but verbal objections; and, moreover, the method urged by those who hold the opinion in question (notably in England, Mr. Cliffe Leslie, and Mr. Ingram), is in a great part the right one. But they are implicated in some of the philosophical delusions of the day, notably those of Mr. Herbert Spencer; they imagine an inevitable and ascertainable course of human action in society, whence they can be fitly called Evolutionists; they cannot see beyond appearances (phenomena), whereas true Social Science presses onward to realities (*ens morale*). Let, however, all further examination of the errors of the Evolutionists be postponed till the right method (logical procedure) of Economics has been set forth; when, also, it will be more convenient to examine the errors of Bagehot, Jevons, and others on the province of the science.

§ 11. Less important than the task of fixing the place of Economics among the sciences is the task of breaking up this particular science into suitable divisions. For if the definition of its province is neither misleading nor obscure, the subsequent partition of that province is hardly likely to do more than make the science somewhat easier, or somewhat harder to be taught and learnt. The division I have adopted (and on which I refer the reader to the Table of Contents and to the beginning of each Book), gives an Introduction on the definition, method, and history of the science, and four Books, the first on economical Elements, the second on economical Constitutions, the third on economical Circulation, the fourth on economical Maladies ; and for the convenience of students, a portion of Politics will be added as a fifth book on the Revenue of Governments. It is likely a better partition might be found, but this is the best I know of, assuming the province of Economics to be as set forth above. For, naturally a different province might need a different partition. As it is, there is great diversity of partition, perhaps the commonest being that of Say, namely, into the Production, Distribution, and Consumption of Wealth. Some leave out Consumption ; others distinguish Exchange or Circulation (*Güterumlauf*) from Distribution ; others add Population as a separate head.* To judge of the convenience of these terms and divisions is not needful here, except briefly to note that they draw attention too much to wealth or commodities (*Güter*), and are, therefore, unfit for a science which looks to the home as much as to the workshop. And as regards one further and frequent division of the science into two parts, one general, treating of industries as a whole, the other special, treating the same questions in relation to the various industries (so notably Rau and Roscher), I will give the just objections of Luigi Cossa (*l. c.* p. 22-23), that this division involves useless repetitions, renders likely the introduction of needless technical details, and brings the danger of considering in the relations of only one industry what is common to all ; and that what is peculiar in different

* See L. Cossa, *Guida allo studio dell' econ. polit.*, ch. ii., for these and other partitions.

industries is best explained in illustrations, digressions, and appendices.*

* Against those who say Political Economy looks only to such laws of production as apply to *all* kinds of wealth, while those applying to the details of particular trades and employments belongs to other sciences, Mill (*Unsettled Questions of Pol. Ec.*, pp. 127-128) objects that no such division exists elsewhere : mineralogy, *e.g.*, is not broken up into two parts, one treating of the properties common to all minerals, another of those peculiar to each particular species of minerals. "The reason is obvious ; there is no distinction *in kind* between the general laws . . . of mineral nature and the peculiar properties of particular species. There is as close an analogy between the general laws and the particular ones as there is between one of the general laws and another : most commonly, indeed, the particular laws are but the complex result of a plurality of general laws modifying each other."

CHAPTER II.

METHOD OF ECONOMICS.

Explanation of the Right Logical Method, § 12, 13—Errors on Method : Hypothetical Method of J. S. Mill, § 14, 15—Cairnes' Method of Allowances, § 16–20—Prevalence of this Error accounted for, § 21—Theories of Bagehot and Jevons, § 22, 23—Intrusion of Mathematics on Economics, § 24—Fundamental Misconceptions of some 'Sociologists,' § 25—Historical Agnosticism (The Kathedersocialisten), § 26—Historical Gnosticism (Criticisms on Roscher, Herbert Spencer, Ingram, and others), § 27–29—The Difficulties of Generalization, § 30, 31—Conclusion, § 32.

§ 12. The word method as applied to a science has two senses, one meaning the way in which the truths of the science are found out, the other the way in which they are made known. The first can be called the logical method or way of research, the second the didactic method or way of teaching.* They are by no means unconnected, and in treating of the first there will be opportunity of saying what is necessary on the second.

From what has already been said upon the position of economical science as a branch of Ethics (§ 1) and its relation to the other sciences and the arts (§ 4, 5) we can find without difficulty its fit logical method. We begin by taking for granted what is known, whether by reason or revelation, on the moral nature of man and his position and destiny on earth. Further we take for granted the results of physical science relating to man and the external world. Then we look at the probable conduct of men in regard to the support,

* Cossa, *Guida*, p. 41. The use of the term method by Roscher to mean mode of treatment (*Behandlungsweise*), is vague, and therefore undesirable. He mixes up the province (or contents) of the science with the way of teaching it.

perpetuation, and enjoyment of life. And we get at the truth by an examination of facts, that is by studying how men in reality have acted and do act in regard to these matters. But the examination must be methodical. To look at all economical facts is plainly impossible. To look at a few taken at random would plainly be insufficient ground for drawing conclusions. Thus it is necessary to make a careful selection of facts suitable in quality and quantity, that is of the fit number and fit sort. And to do this the observer, besides the capacity for judging of the truth of statements and of the real character of actions, must have some rule by which to judge what is to the purpose and what not, some clue to guide him through the labyrinth. This rule or clue can be obtained by remembering the physical and, above all, the moral truths from which we start and the end at which we aim, namely, to learn the morality of domestic, industrial, and social life. Whence is plain that those who are in error on morality are no fit teachers of economical science. But if the facts have been selected by a capable observer, we use them to convince ourselves that what from our knowledge of men and things we had thought likely is really likely; or we draw conclusions straight from the facts, and then in order to guard against mistake we compare these conclusions with what the moral and physical nature of man, and the properties of external things, would have led us to expect. Finally, having discovered what we can on the likelihood of human action in regard to the support, perpetuation, and enjoyment of life, we reach the main and proper task of economical science, and endeavour to learn what is right and wrong in the actions of men concerning the house and the farm, the workshop and the market place, the banquet hall and the amphitheatre. And we must keep in mind that morality depends not only on the intention of the doer (*finis operantis*) but also on the thing done (*objectum* or *finis operis*) and the surroundings (*circumstantiae*). Moreover, according to the difference of time and place, not only may the surroundings be different, but the thing done, though the same in name or appearance, may be very different in reality. It follows that to judge rightly of morality we must not imagine all ages and countries

are like our own, but recognise the diversity of motives and desires, of customs and ideas, and that therefore according to these diversities, the applications of the unchangeable principles of right action will be very different.* And this method applies to political no less than to economical science, with this only difference, that the set of actions it examines are in a different department from those examined by economics; but the two sciences are in intimate connection and mutual dependence, the results of economics often being needful for reaching a conclusion in Politics, and conversely.

§ 13. Let an illustration show the working of the method I have described. Reason tells us that it is wrong for a man, for mere pleasure, to deprive himself of his senses, wholly or partly; revelation tells us that man's nature is fallen and prone to vice; physical science tells us the properties of certain narcotics as opium or chloral hydrate, noxious except when used for medicinal ends, and yet an enticement as satisfying certain physical cravings; the examination of "facts," in other words, the study of past and present economical history, shows us examples of how the abuse of such narcotics has increased with the facilities

* It has been well remarked: "One nation differs so much from another, as to be often unable to judge of the moral character of the other's actions. What, for instance, would be pride in the inhabitant of one country would only be patriotism in the inhabitant of another; or what would be falsehood in one country is only the characteristic way of putting things in another. It is not that the immutable principles of morality can be changed by national character or by climate; but that outward actions signify such different inward habits in various countries, that a foreigner is no judge of them. Thus a foreign history of any people is for the most part little better than an hypothesis, and is not unfrequently a misapprehension from first to last. . . . As it is with the countries of the world, so it is with the ages of the world. Each age has its own distinctive spirit. It has its own proper virtues and its own proper vices. It has its own sciences, inventions, literature, policy, and development. Each age thinks itself peculiar, which it is: and imagines it is better than other ages, which it is not. It is probably neither better nor worse. In substantial matters the ages are pretty much on a level with each other. But each has its own way, and requires to be dealt with in that way. . . . We must not make light of the differences of the ages. Each age needs persuading in a manner of its own. It finds its own difficulties in religion. It has its own peculiar temptations and follies.' —F. W. Faber, *The Precious Blood*, pp. 19–20, 2nd ed.

of obtaining them and decreased with the restrictions or prohibitions of their use imposed by authority; and from the facts we draw the probable conclusion that the action of the authorities is the cause of the amendment; and then confirm our conclusion by seeing how it agrees with what we know of human nature, namely, with the motives of reverence for authority, of fear of punishment, of aversion to the trouble now needful to obtain the forbidden indulgence; also with the greater capacity to resist temptation in proportion as the unlawful object is more continuously and further removed from the senses. Moreover, by the same reasoning process we shall reach the conclusion that the action of authorities against the evil in question is unlikely to bring other evils, or at least none of any weight, compared with the abuse of narcotics. Then at last the science called Economics is able to pronounce as a truth that it is right on the part of all authorities (religious and civil, domestic, social and industrial) to oppose, not the vice of opium-eaters and chloralists, for that is the common and obvious duty of every one, but the unrestricted production and sale of the alluring narcotics, and to limit the traffic in them to what is needed by the doctor and the surgeon.

Let those who dispute the assertions made in the foregoing illustration remember that these are not the point in question, which is about the proper mode of reasoning; and let them look at the form, and not trouble about the matter of the illustration. Moreover, if only the right method be adopted, it seems to me of little consequence what name, or whether any name at all, is given to it. Let each, at his pleasure, then, call it concrete-deductive, or complete, or mixed, or realistic, or comparative, or historical. But I shall use none of these, lest I mislead, but simply speak of the right method, not presumptuously, for all naturally think their own method the right one, whatever they call it, but as a short phrase for the method I have explained as seeming to me the right one. On which enough has here been said, as objections will best find their answer in the criticism of opposing theories.* But before coming to these I will

* How far the foregoing resembles the method recommended for sociology by Comte or by Mill (see Mill's article in the *Westminster*

add the general remark on reasoning which seems of particular weight for Economics and Politics, that we must keep the golden mean between the excess and defect of precision. Thus on the one hand, mindful that "exactness must not be looked for in all discussions alike any more than in all works of handicraft," and that "a cultivated mind will only seek that degree of exactness which the nature of the matter admits" (Aristot. *Eth. Nic.* Bk. I. c. 1 [c. 3]), and that "all statements as to emotions and actions can be definite only so far as these are definite" (*Ibid.* Bk. IX. c. 2), let us not weary ourselves with seeking the exact boundaries between the lawful and unlawful, the harmless and harmful; nor ask for the statistics of happiness or affection. On the other hand, let us remember that "every rational discussion should start with a definition, so that the object of the discussion may be understood" (Cicero, *De offic.* l. I. c. 2), and let us thus avoid being entangled by those indefinite and misleading terms, which are the bane of economical and political science and the source of fruitless controversies: like Ricardo, whose ambiguity on the word "value" makes his work "a long enigma" (Whately); or Mill, who defines the word "profit" in one way and explains it in another; or Bastiat erecting a fabric of sophistry on the double meaning of the word service (well exposed by Cairnes, *Essays in Polit. Econ.* Essay IX.); or Roscher, who makes the term "wants" or "requirements" (*Bedürfnisse*) a fundamental notion, and yet fails to define it, and uses it, now to mean what is desired, now what ought to be desired.

§ 14. Let us now examine the chief errors on the method of Economics. All these errors can be roughly divided into

Review, April, 1865, pp. 384-387, reprinted as *Auguste Comte and Positivism*, and Mill's *Logic*, Bk. VI. ch. ix. and x.), is not necessary to be discussed. The best exposition I know of the proper method of Economics, is given by F. G. Schulze, *Nationalökonomie*, § 9-11, published 1856. How to apply the right method is, perhaps, nowhere better seen than in Aristotle's *Politics*. For the method of *Politics*, as I have said, is exactly the same as that of Economics. Mark Aristotle's copious illustrations from real life, and his separation of technical action from moral action—of political arts looking at a special end (e.g., the art of maintaining a tyrannis (*Politics* VIII. (V) c. 9) from political science looking at the end of man.

two groups, namely, excesses on the deductive (or *à priori*) side of reasoning, and excesses on the inductive (or *à posteriori*) side. As to authors, particular attention shall be given to what is erroneous in the methods of Mill, Cairnes, Bagehot, Jevons, Roscher, Ingram, and Herbert Spencer. Let us begin with the errors on the deductive side.

The view set forth by Mill in the fifth Essay of his *Unsettled Questions of Political Economy* may be summarized as follows. Political Economy is concerned with man solely as a being desirous of getting wealth. It abstracts from all motives except the desire of wealth and the antagonistic principles, namely, aversion to labour and the desire of the present enjoyment of costly indulgences. It shows how men would act if impelled only by the aforesaid motive and counter-motives. For to judge how men will act under a variety of desires and aversions, we must show how they would act under the exclusive influence of each one in particular. Political Economy reasons from assumptions, not facts. Its conclusions, like those of geometry, are true only in the abstract. To apply them they have to be corrected by other motives that influence the result. So far as it is known, or may be presumed, that the conduct of man in the pursuit of wealth is under the collateral influence of any other of the properties of our nature than the desire of obtaining the greatest quantity of wealth with the least labour and self-denial, the conclusions of Political Economy will so far fail of being applicable to the explanation or prediction of real events, until they are modified by a correct allowance for the degree of influence exercised by the other cause. Only rarely, for the sake of convenience, these corrections (for instance, as regards population) are interpolated into the exposition of Political Economy and the strictness of scientific arrangement departed from. So far Mill.

§ 15. Against this view, which, as being based on (or starting from) an hypothesis, may be called the hypothetical view, can be urged the following objections.* (a.) There is

* The two first of the following objections are from Senior (*Four Introd. Lectures on Polit. Ec.*, lect. iv.), who understood Mill and Ricardo better, I think, than Cairnes did; the latter seemed to deny that

great danger of starting with hypothesis and then reasoning as though it were reality, as Ricardo did ; and (b.) there is danger of error because there is no test of the correctness of conclusions ; whereas, if the conclusions are meant to be real, not imaginary, and are at startling variance with actual facts, we are warned that there must be some mistake in our premisses or our reasoning. Further, as Mr. Syme (*Westminster Review*, July, 1871) urges, (c.) hypotheses are admissible only when containing nothing contradictory to fact, and when sufficient to explain the phenomena without the aid of any other hypothesis. But Mill's hypothesis is obviously contradictory to fact, and involves a whole series of hypotheses ; for the force and direction of the motive of self-interest, as well as its existence has to be assumed : all men are to be precisely similar, and the aforesaid motive ever to act with the same strength and in the same way ; which is untrue ; for the "selfishness" of one man seeks immediate gratification, of another a competence in old age, of a third the foundation of a family ; and in the same individual are different directions at different times of the same motive, not to speak of different motives. So far Syme ; and notice also that Mill's hypothesis requires all men to know their pecuniary interests and the way to follow them : in glaring contrast with the realities of ignorance, prejudice, and self-deception. Moreover (d.) it is impossible to find out how men would act under the exclusive dominion of one motive ; and (e.) even if the whole series of hypothetical sciences of man were completed, each looking at him as he would be if led by one motive (as by the desire of honour, or of power, or of sensual gratification, or by family affection, or by philanthropy, or by malevolence), it would still be impossible to sum up the results and pass from hypothesis to reality. Finally, (f.) Mill has only

they *started* from hypothesis. I should add that I am not criticizing Mill's personal views, which were either fluctuating or contradictory ; but only his written essay on economical method. It may be true that in his other writings can be found not merely a departure from, but also a confutation of, the method taught in that Essay (see *infra*, § 20) ; yet still the essay remains, and a second edition appeared in 1874. Mill's inconsistency is noticed by Mr. Ingram, *Address on Polit. Econ.* pp. 14, 24-25.

examined the *homo oeconomicus*, or dollar-hunting animal, without attempting to complete, or even to continue the series of hypothetical sciences; and yet boldly treats of real life, in defiance of his theory. And perhaps he may have assented in his later years to the more plausible theory of Cairnes, which shall be examined forthwith.

§ 16. The method of Economics as set forth by Cairnes, (*Character and Logical Method of Polit. Econ.*, 2d. ed., Lect. ii. iii. iv. v.) can perhaps briefly be stated as follows. Political Economy starts from certain mental and physical premisses or *ultimate facts* (cardinal principles, leading causes), drawn alike from the world of matter, and the world of mind, and knowable through our consciousness of what passes in our own minds and through the information which our senses can convey of external facts. From these premisses we deduce *economic laws*, which are true in the sense a law of mechanics or astronomy is true, namely, on the hypothesis of the *absence of disturbing causes*. Then we compare the conclusion with facts; and here statistics are most useful as auxiliaries, helping us to verify the accuracy of our reasoning from the fundamental assumptions of the science, and also to discover the effect on wealth of *subordinate influences* (physical or mental, political or social), as distinct from the more cardinal principles. So an economic law does not assert the order in which the phenomena occur, but a tendency which they obey, and therefore when *applied* to external events is true only in the absence of disturbing causes, thus representing an hypothetical, not a positive truth. The doctrines of Political Economy are to be understood as asserting not what *will* take place, but what *would*, or what *tends* to take place. And being deduced from certain principles of human nature, as they operate under certain physical conditions, they can be established only by proving the existence of such principles and conditions, and shewing that the tendency asserted follows as a necessary consequence; and they can be refuted, not by statistics, but only by proving that the said, principles and conditions do not exist, or that the tendency is not a necessary consequence. The economic law does not fail because the tendency is neutralized, any more than the law of gravitation fails when its force is

neutralized by the action of friction. And as to the aforesaid ultimate facts, though the causes influencing wealth are indeed innumerable, and all of them cannot be found, yet we can find the leading ones, namely, the desire to obtain wealth, and at the least possible sacrifice (aversion to labour); also the propensities which, with our bodily conditions as they are, determine the law of population; and further, the physical qualities of the soil, and other natural agents. And besides these which are of paramount importance as to the production and distribution of wealth, other subordinate principles can be ascertained and appreciated with sufficient accuracy, and allowance made for them as disturbing causes. Examples of such subordinate influences are: the political and social institutions of a country, in particular laws on land tenure; great discoveries in the art of production, as the steam-engine; the influence of custom modifying human conduct on the pursuit of wealth; ideas of decency, comfort and luxury, developing as society progresses, and modifying the natural force of the principles of population. We can thus attain, if not to absolute scientific perfection, at least to the discovery of solid and valuable results.*

§ 17. This theory of Cairnes, which we will name the Method of Allowances, can perhaps be looked on as the theory in possession in England and France,† though its hold over English economists is being weakened by the rival theory of evolution, and perhaps in a few years it may no longer be worth the trouble of refutation.

Let us begin by noticing a verbal ambiguity which is not a necessary part of the theory. Long ago Whately, (*Lectures on Polit. Econ.*, p. 164, 4th ed.,) noticed how the word *tendency* had two senses: either the existence of a

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cause which if operating unimpeded would produce the result, in which sense man has a tendency to fall prostrate ; or else, the existence of such a state of things, that the result may be expected to take place, in which sense man has a tendency to stand erect rather than to fall prostrate. The first sense is the most scientific, and implies no probability or improbability ; we could say with equal truth, man has a tendency to stand or a tendency to fall. The second sense implies probability, nor do I see the use of the term, or of saying that Political Economy is a science of tendencies, when we can speak of probabilities, equiprobabilities, and improbabilities. It is, however, in this second sense that Cairnes uses the word tendency, and must be understood accordingly.*

The objections to his theory, and to others akin to it, may perhaps be reduced to three heads : the first, that the mental cardinal principles are inadequate, the second, that they are untrue, the third, that to make allowances as proposed is inadmissible. And I draw much from two instructive articles of Mr. Cliffe Leslie, one on the Philosophical Method of Political Economy in *Hermathena*, No. 4, Dublin, 1876, the other in the *Fortnightly Review*, Jan. 1879.

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the various things comprehended in the word wealth satisfy are lumped together." Similarly as to aversion to labour; as though there was no distinction between the kinds of labour, and kinds of aversion. And as to the 'principles of population,' these are not a simple force working one way; for the sexual passion, the desire of offspring, the desire of female companionship, and the love of family fame or prosperity, are by no means alike in their nature or result. So these grand cardinal principles cannot logically lead us to any conclusion.*

§ 19. Secondly: it is untrue to say simply that the main mental causes affecting wealth are the desire for it and the aversion to labour. If, indeed, we add to these causes the 'principles of population,' and mean by this the numerous and often conflicting motives connected with family life, and the relations of the sexes; the proposition, though still untrue, is less preposterous; but only less so by making more preposterous the plan of reasoning deductively from causes so numerous and so conflicting. In proportion then as this second head of objections is weakened, the first head is strengthened. But even if we allow this wider view of the case of the science, and stretch the aforesaid cardinal principles to their utmost;† there still remain many other 'mental causes' or motives as to wealth, of by no means 'subordinate' importance. Not the desire of wealth, but the fear of punishment was the primary motive for the production of wealth among the slaves of classical Greece and Italy, and of the West Indies and Southern States of North America. The

* They may be mere truisms, quite fruitless for science. Thus Cairnes (*l.c.* p. 78) says:—"Every one feels that in selecting an industrial pursuit, *where the advantages are equal in other respects*, he will select that in which he may hope to obtain the largest remuneration in proportion to the sacrifices he undergoes." If we interpret what I have italicised, in a way that will make his proposition true, it becomes the truism, that if the influence of all motives but one leave us undecided that one will be the motive we shall follow.

† So Mr. Cliffe Leslie's just remark, "the exertions of that hardest worked of all labourers, the poor man's wife, can hardly be explained by the love of wealth and ease" (*Fortnightly Rev.*, Jan. 1879, p. 29), though conclusive against Mr. Lowe, might be evaded by Cairnes as explainable by 'the principles of population.'

fear of imprisonment keeps the luckless Hindoo debtor in lifelong bondage to the usurer, for whom he becomes a most diligent producer of wealth. Patriotism drew numbers of young Germans from safe and lucrative posts abroad to fight in 1870 for the Fatherland. Patriotism keeps millions from the pursuit of wealth, and interrupts their industrial life by forced military service. Patriotism brings back the Tyrolese from the ends of the earth to his barren native valley. The love of honour has kept many men from trades and employments which though profitable, have been held degrading to freemen, or to the well-born ; while in other men it has overcome the aversion to labour and induced them to work off a debt of honour. The love of power (like that of honour), can induce us to increase our wealth, as is obvious ; but also to abstain from increasing it, as the English landlord preferring low-rented and subservient, to high-rented and self-asserting tenants, or to squander it as Caesar or Alcibiades. The love of labour for itself, not for the sake of the wealth it may bring, nor for the religious exercise it may afford, but simply for its own sake, is a frequent and powerful motive, and seen not merely in scientific, artistic, and literary pursuits, but in the manual labour of the mechanic and husbandman, signally of the peasant-owner, and even in the counting-house and law office which to some seem so dreary. So the love of labour can claim to be a 'cardinal principle,' as well as to the aversion to labour.*

* Naturally the love is no more to be exaggerated than the aversion, as when Fourier hoped by his system to raise even sewer cleaping to a 'passion.' But, on the other hand, Cairnes verges on the absurd when he says (*Character, etc., of Pol. Ec.*, p. 76), "Every one who embarks in any industrial pursuit . . . knows that he does so from a desire, for whatever purpose, to possess himself of wealth ; he knows that according to his lights, he will proceed towards his end in the shortest way open to him." As though (to keep within the United Kingdom) a bad English trader could not help cheating and lying, if that were the shortest way to work, according to his lights ; and a bad Scotch manufacturer could not help extracting from his workmen the maximum of produce for the minimum of wages ; and a bad Irish landlord could not help rack-renting his tenants. And as though many an Irish tenant, did not, when 'embarking' on the cultivation of land, agree to pay, in the shape of good-will and rent, so much, that he could scarcely have chosen a longer way to wealth.

Excitement can be so strong a motive as to make great changes in the "distribution" of wealth. Thus we hear of the Germans of the time of Tacitus and of the modern Burmese gambling away first their property, and then the liberty of their children, their wives, and themselves. Thus, too, in defiance of their "interest," numbers subscribe to lotteries, and even engage in trades which yield on an average not profit, but loss. Custom or routine (that is, the aversion to change), is often, and in all departments of Economics, of powerful influence, and notably in all matters of enjoyment and expenditure, as those know who would seek to check the wasteful outlay of the Hindoos on their weddings and of the English on their food. The sense of fairness and justice is sometimes, in default of religious motives, of great importance as in modern England in the relations between masters and workmen. Natural philanthropy (or benevolence) may in like manner be a powerful economical force, and be the cause as in England and the United States of large masses of property passing from the hands of individuals into those of the public. Finally, who can tell the gigantic power of religious motives, from the oppressive bondage of the darkest superstition to the liberty of the truth? Religion, not pecuniary interest, may fix the time for buying and selling, for ploughing, sowing and reaping, and even, as in modern India, may determine the choice of crops.* Religion may suspend all or much or some industrial work on certain days or at certain seasons, as the Christian Sundays and Holidays, or the Jewish Sabbatical year; may alter the course of industry by regulations on food, as the flesh of oxen forbade to the Hindoos, and laws of fasting and abstinence among Christians.

* How the Hindu cultivator is influenced in his choice of crops by divination, see A. O. Hume, *Agricult. Reform in India*, p. 10 and Appendix A. The fortune-tellers are called on in China to select a lucky day or days on which to sow the seed (Gray, *China*, ii. p. 124); and the mounds of earth allowed to remain in the centre of many of the rice fields, and the long rows of cedar trees across the rice plain, that are let grow, though they occupy much space, are left not by speculation but by superstition (*ibid.*, p. 111). At Cardross, in Scotland, the prejudice against ploughing before March 10, necessitated a late and disadvantageous harvest (*Academy*, 2nd of July, 1881).

Religion may extinguish among multitudes the desire of wealth and the aversion to labour as among the tens of thousands of Christian monks in Egypt in the fourth century. And certainly neither the economical desire for wealth, nor the aversion to labour, nor the principles of population, heaped up around the shrines of Greece the treasures which became the plunder of later ages; nor have caused the transfer of wealth to the Buddhist temples and monks; nor were the reason that much of the wealth of Europe was once in the hands of the clergy, or in our own day induce the faithful after so many spoliations to repair the sacred patrimony of the Church and the poor. And I might speak of how religion might exercise the most decisive influence on the 'principles of population,' were it not that enough has been said to shew that the principles asserted to be the only main ones as to wealth are not the only such, but merely some among many.

§ 20. Thirdly, it will not mend matters to make allowances for these others. In a wise moment Mill has said: "It is not allowances that are wanted. . . . It is unphilosophical to construct a science out of a few of the agencies by which the phenomena are determined we ought to study all the determining agencies equally, and endeavour, so far as can be done, to include all of them within the pale of the science; else we shall infallibly bestow a disproportionate attention upon those which our theory takes into account, while we misestimate the rest, and probably under-rate their importance. That the deductions should be from the whole and not from a part only of the laws of nature that are concerned, would be desirable even if those omitted were so insignificant in comparison with the others, that they might, for most purposes and on most occasions, be left out of the account. But this is far indeed from being true in the social science. The phenomena of society do not depend, in essentials, on some one agency or law of human nature, with only inconsiderable modifications from others. The whole of the qualities of human nature influence those phenomena, and there is not one which influences them in a small degree. There is not one the removal or any great alteration of which would not materially affect the whole

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aspect of society, and change more or less the sequence of social phenomena generally."*

So far Mill. Nor let us hear the false analogy that in various other sciences allowances are made and a distinction drawn between pure and applied, and that therefore we must distinguish pure and applied Political Economy. When we really know the main and constant causes which act always with the same force and in the same direction, we can make allowance for what is subordinate or variable, as for friction in mechanics. But in Economics first of all the alleged main causes are not, like physical causes, invariable in their action (§ 5), and then the alleged disturbing causes are, as we have seen, no less constant and important, and might just as well be made the base of 'pure Political Economy' and the others only find their place in 'applied Political Economy.'† Thus we might just as well take as our base that all men seek the welfare of their country, and deduce the maxim of pure science that no trader will sell arms to the enemy; and then, before coming to applied Political Economy make allowance for pecuniary interest; as, *vice versâ*, deduce from the love of wealth that they will sell in the best market, though it be to the enemy, and then, before applying our theory, make allowance for patriotism as a disturbing cause or a kind of friction (as is done by Cairnes, *Character and Logical Method of Polit. Econ.* p. 98). And so we may say with Mr. Cliffe Leslie (*Fortnightly*

* J. S. Mill, *System of Logic*, bk. vi. ch. viii. *ad fin.* He is combating the 'abstract-deductive' or 'geometrical' method in sociology, practised by Hobbes and Bentham.

† Wolowski, in his interesting preface to the French translation of Roscher's *Nationalökonomie*, Paris, 1857, well combats Rossi's analogy of mathematical deductions supposing a vacuum, and neglecting certain facts and resistances:—"Or, du moment où il est question d'intérêts humains, il n'est pas possible de supposer le vide, de négliger les faits les plus vulgaires et les résistances les plus communes, ni de s'égarer dans l'abstraction; les *correctifs* de l'économie politique appliquée peuvent ne pas effacer ce péché originel, ou bien ils risquent fort de voiler les principes eux-mêmes. Et encore dans la balistique [science of projectiles] vous pouvez mesurer la résistance qu'oppose le milieu où vous êtes appelé à fonctionner; la force d'impulsion et le but, tout obéit à la même loi, tout se plie aux mêmes procédés de calcul. Mais en est-il ainsi quand vous touchez à ce qu'il y a de plus intime et de plus sensible dans l'homme?" (p. lxi.)

Review, Jan. 1879, p. 41), that "to isolate a single force, even if a real force and not a mere abstraction, and to call deductions from it alone the laws of wealth, can lead only to error, and is radically unscientific."*

§ 21. But a widespread error is not properly confuted till reasons are shewn for its prevalence. Now the error in question, of which Cairnes is the most reasonable supporter that I know, and which makes pecuniary interest the dominant motive in regard to wealth, can be accounted for on several grounds. First, in a certain sphere the alleged motive is truly enough predominant, namely, in the relations of traders in what may be called wholesale markets in a society like that of modern England. And what is true of a part has been taken as true of the whole, and all the more so from the undue importance attached to that part in England through the giant growth of English commerce. Moreover, there can be men or even a class of men in whom the motive of money-making is all-powerful, and rules them till their grave. Such men were especially conspicuous in England in the first half of this century; and what was true of them was taken as true of all, even in different countries and former ages. This narrow-mindedness in various degrees reaching to absurdity† is no new failing and need not surprise us; for long ago St. Augustine (*Confessiones*, l. iii. c. 7) rebuked those who measure the conduct and customs of the whole race of men by their own; and noticed how men take

* A similar false method in the field of Politics, originating with Kant, is well criticised by Ferdinand Walter, *Naturrecht und Politik*, § 12. Bonn, 1871. See Appendix B.

† As Senior (*Encyclop. Metropolitana*, vol. vi. 1850; *Polit. Economy*, pp. 12, 13), saying: "To seem more rich . . . than those within their own sphere of comparison, is with almost all men who are placed beyond the fear of actual want, the ruling principle of conduct." "To appear rich is the ruling passion of the bulk of mankind." Of Bentham it has been said (by Karl Marx, *Das Kapital*, 2nd edit. p. 634, note 64), that "with the most naïve dulness, he supposes the modern bourgeois, in particular the English bourgeois, to be the normal type of man." Adam Smith is not narrow-minded enough to be true to his own absurd assumptions on self-interest, as in bk. ii. ch. v. p. 167:—"The consideration of his own private profit is the sole motive which determines the owner of any capital to employ it, either in agriculture, in manufactures, or in some particular branch of the wholesale or retail trade."

offence at former ages and foreign peoples, not being able to understand the reason of their conduct, so different from that to which they are accustomed.* And this deduction of a general conclusion from particular premises is a natural infirmity of human reasoning; while in the case in point the error has a ground of truth in recognising that there are, in spite of the historical school, principles of human nature common to all times and places; only it errs as to which principles. Lastly, the apparent simplicity and completeness of the deductive theory, *in se ipso totus, teres atque rotundus*, is one cause, though not, as Mr. Leslie implies, the only cause (*Fortnightly Review*, Jan. 1879, pp. 35, 37), of its attractiveness; for men are allured by system and uniformity.

§ 22. Let us now turn from the errors on the deductive to those on the inductive side. But first let us look at two writers who in appearance may occupy the golden mean, but not in reality: I mean Bagehot and Jevons. The theory of the first may perhaps be summarized as follows. Political Economy, or English Political Economy, for different ones can be constructed, is a theory of commerce as commerce tends more and more to be when capital increases and competition grows. It is a theory of the principal causes affecting wealth in certain societies; and where the economists have erred is in not seeing that these causes are only true in a society of grown-up competitive commerce such as we have it in England, and that only here can other causes be put under the minor head of 'friction.' The science of Political Economy as we have it in England is the science of business as business is in large and productive trading communities. It assumes a sort of human nature such as we see it everywhere around us, and simplifies that human nature; it looks at one part of it only, and assumes that man is actuated only by the motive of money. We know that this

* In the same way Mill (*Auguste Comte and Positivism*. Reprinted 1865, pp. 82, 83) notices how some Political Economists fall into the error "of regarding . . . their present experience of mankind as of universal validity; mistaking temporary or local phases of human character for human nature itself; . . . deeming it impossible, in spite of the strongest evidence, that the earth can produce human beings of a different type to that which is familiar to them, in their own age, or even, perhaps, in their own country."

is not so, but we assume it for simplicity's sake as an hypothesis. (*Fortnightly Review*, Feb. 1876.)

Omitting other criticisms, I think this theory open to a triple objection. First, the limitation of 'Political Economy' is so arbitrary as to be intolerable. Why should it be confined to males in modern England, as Mr. Cliffe Leslie well asks (*Fortnightly Review*, Jan. 1879, p. 37)? And then the limitation is gravely deficient by its vagueness; for the term competition is anything but simple; and the terms business and commerce in the widest sense include almost every dealing in any way connected with wealth, while in the narrowest sense they do not even include manufactures, and only mean the dealings of wholesale merchants and of the so-called money-market. Thirdly, the said limitation only lessens but does not remove the unfitness of the method proposed. There is the assumption of what is known to be untrue, and the attempt to mend this failing by allowances; against which enough has already been said (§ 20). Nor let any one object that I have allowed the 'motive of money' to be predominant in those very wholesale transactions of modern trade to which Bagehot confines Political Economy. For even then he would err in making this truth, which we know by inference is so, into an hypothesis of which he says, "we know that this is not so." But in fact he does not confine his theory to the operations of the 'market,' but treats also, for example, of 'labour'; and here even in modern England to assume only the motive of money is preposterous.

§ 23. Mr. Jevons, girt round with strange words and numbers and diagrams, is difficult to approach or attack. And he seems often so near the truth that I am unwilling to think he combines the errors of the old economists and new sociologists. He comes to terms with the latter by the cession of the larger part of human action as to wealth, and which, under the name of economic Sociology, he allows to be a branch of the science of society; and, like Bagehot, he retains only a portion, though not quite the same portion, to be the province of what he calls Economics (*Theory of Political Economy*, pp. 21, 22, 2nd ed.). This is composed of deductions or calculations from self-interest, and is a

mathematical science. It can be described as the mechanics of utility and self-interest (*Ibid.* p. 23, *Fortnightly Review*, Nov. 1876, p. 626) ; and it treats of the lowest rank of feelings. "The Calculus of utility aims at supplying the ordinary wants of man at the least cost of labour. Each labourer, in the absence of other motives, is supposed to devote his energy to the accumulation of wealth. A higher calculus of moral right and wrong would be needed to shew how he may best employ that wealth for the good of others as well as himself. But when that higher calculus gives no prohibition, we need the lower calculus to gain us the utmost good in matters of moral indifference." (*Theory of Political Economy*, p. 29, 2nd edit.)

Let us pass by for the present other criticisms upon Mr. Jevons, nor trouble ourselves with his feeble and contradictory utilitarianism, and only notice two truths which underlie his theory of Economics, and his misuse of them. First, that there are principles of human action as to wealth that are by no means transformed by time or changed by race and locality ; secondly, that in certain transactions among men pecuniary advantage is the immediate predominant motive. But as to the first, Mr. Jevons errs in separating them from the varied and changeable principles, as though these were not dependent on those, and as though 'economic Sociology' were possible apart from 'Economics.' And as to the second, how perverse to spend time on examining what *would* be done if men were what they are *not*, instead of what is *really* done where the said motive is *really* predominant ! So I think that, as far as his economical theories are not a part of social science, they are mere fruitless speculations.

§ 24. In connection with Mr. Jevons, a word should be added on what is called the mathematical method of Political Economy. The point at issue is mainly concerning the best way of teaching (didactic method) rather than the right way of research (logical method). Now it is true that in parts of economical science we have to deal with quantities, and that here mathematical symbolism *can* be used. Moreover, in a few cases the use of mathematical figures may perhaps be useful to help us to understand or to remember. But as a rule they only make more obscure and unattractive what

they were meant to illustrate ;* while the more important parts of the science, where we are immediately considering goodness and happiness, are incapable of quantitative measurements. Misleading, then, is the assertion of Mr. Jevons that Political Economy is mathematical because it treats of quantities (*l. c.* p. xxii. *seq.* 4 *seq.*) ; as though it treated of nothing else but quantities. Moreover, this abuse of mathematics is likely to make us exaggerate the importance of one class of observation, namely, statistics in the narrow sense of returns that can be reduced to figures ; and to neglect those much more important observations, not of impersonal aggregates but of personal life in the shop or the field, on the seas or by the fireside. Long ago, in the first edition of his *Ouvriers européens* (1855, p. 11), Le Play noticed how limited was the field for the application of statistics, abstracting as they do from those surroundings which may precisely be of the most interest for social science ; and how direct observation, such as made by the English Royal Commissions, is the better method. To despise or reject statistics would indeed be folly ; but because we need the dry bones, this is no reason for looking on them as the living flesh. And thus, just as we must not suffer the domain of Ethics, of which Economics are one province, to be invaded by the votaries of physical science, so also we must repel the invasion of the mathematicians.†

§ 25. Let us turn to errors on method which can be roughly classed as those on the inductive side. And mark, the degrees of error are very great, from the unhistorical folly, extreme in Carey and Prittwitz, and mitigated in Mr.

* This and other criticisms upon Mr. Jevons are made in the excellent review of his *Theory of Polit. Econ.* in *The Academy*, 26 July, 1879, by Mr. Cliffe Leslie. *The Times* might be printed in shorthand, with great saving of ink and paper—but the public ! Mr. Cliffe Leslie expresses a pious wish, wherein I heartily concur, that Ricardo's system had been given *only* a mathematical shape ; for this would have been an effectual bar to its mischievous influence.

† Arguments against the 'mathematical method' are given by Roscher, *Nationalökonomie*, § 22 ; Cairnes, *Character and Logical Method of Polit. Econ.* 2nd edit. lect. v. ; Contzen, *Einleitung in das Staats—und Volkswirths. Studium*, § 2, who sensibly remarks that we should look to the important differences between Economics and Mathematics, rather than to the unimportant resemblances.

Herbert Spencer, to the more specious illusions of the learned Roscher, and the comparative correctness of Schäffler, Sir Henry Maine, and Mr. Cliffe Leslie. Moreover, there is much in the writings upon method of some of these and similar authors (notably the German '*Kathedersocialisten*') in complete accord with the method I have upheld (§ 12, 13); but here I am only concerned with them so far as they are wrong; while so far as they are right they cannot claim (still less can I) to have found out anything new, but merely to have returned to the old path of logical reasoning.*

The logical errors of 'inductive' economists may perhaps be put under two heads, the first including the defect, the second the excess, of their conclusions. And for convenience I will style the first historical agnosticism, the second historical gnosticism; noticing, by the way, that their seeming contradiction by no means makes it impossible for the same author to fall into both errors. But, before considering these, let me say a word on certain fundamental errors and misconceptions which I have not to confute, indeed, but only to notice. Plainly, as Economics are a part of Ethics, those who are ensnared in a false ethical system (as Adam Smith) will gravely err in matters economical; while those who (in reality if not in words) follow no ethical system at all, making a clean sweep of morality by the denial of free-will

* Thus, long ago, Aristotle (*Ethic. Nicom.* x. 9) bid us look to real life if we would reach the truth as regards moral action: τὸ δ' ἀληθὲς ἐν τοῖς πρακτοῖς ἐκ τῶν ἔργων καὶ τοῦ βίου κρίνεται· ἐν τούτοις γὰρ τὸ κύριον. Σκοπεῖν δὴ τὰ προειρημένα χρή ἐπὶ τὰ ἔργα καὶ τὸν βίον ἐπιφέροντας, καὶ συναδόντων μὲν τοῖς ἔργοις ἀποδεκτέον, διαφωνούντων δὲ λόγους ὑποληπτέον. And, as if foreseeing the follies of Bentham and Ricardo, he says in regard to social science (*Polit.* I. i., 3^b), that here, as elsewhere, the man will reason best who examines the process of growth, and this from the very beginning: εἰ δὴ τις ἐξ ἀρχῆς τὰ πράγματα φνόμενα βλέψειεν ὥσπερ ἐν τοῖς ἄλλοις καὶ ἐν τούτοις κάλλιστ' ἂν οὕτω θεωρήσειεν. The need of the unity of science, and of not treating 'Political Economy' apart from 'Sociology,' was rightly urged by Auguste Comte, the precursor of the modern Sociologists and Kathedersocialisten. But this unity was familiar to the scholastic philosophy, and the return to the notion of 'ensemble' or 'consensus' should not be called originality, but repentance (*cf.* Claudio Jannet, *Le Correspondant*, tome 112, pp. 888, 889). Yet Mr. Ingram (*Address on Pol. Ec.*, p. 13) would have us believe that the first adequate conception of the nature and conditions of social science was by Comte!

and of the distinction of right and wrong, are unfit to observe and reason in political and economical science. And as regards what is called social evolution, or the process of change in the relations among men unintended by them, and the result of their actions having unintentionally set at work (or made *actual*) causes of action hitherto dormant (or *potential*): it is first of all a misconception to think that the existence of such 'laws' of progression implies the absence of free-will; whereon I have already spoken (*sup.* § 5). A second misconception is that any providential interposition in the course of human affairs is destructive to social science. Thus Mr. Herbert Spencer (*Study of Sociology*, 5th. ed. p. 394) frivolously derides as illogical the partnership between the ideas of natural causation and providential interference; as though the said 'interference,' instead of being opposed to, did not rather presuppose a natural order of events which is usually undisturbed, though of course, like the physical order of the world, to be ultimately referred back to divine Providence.* And it is a further misconception to think that any doctrine of physical or moral evolution is in opposition to Christian teaching; when much rather the religious doctrine of our First Cause and Last End lights up the darkness that else must envelop the starting point and the goal of any process of evolution; while Christian theology can be said to have long ago set forth the whole universe as in ceaseless progression towards an end ordained beforehand.† But let us return to the

* With characteristic inconsistency, Mr. Spencer admits that there can be no prevision of the occurrences which make up ordinary history, namely, biographical facts, the events of a man's life (*ibid.* p. 56, 58). But why, then, cannot Providence intervene in such occurrences without disturbing the laws which Mr. Spencer thinks govern the progress of society in general? Again, he implies that a given policy can affect the normal course of social evolution (*ibid.* p. 71); and says that it is quite possible, within limits, to 'perturb, to retard, or to disorder the process' (*ibid.* p. 401). Nor does he think that such disturbance destroys the possibility of social science. Why, then, should analogous 'disturbances' on the part of divine Providence be destructive of the science?

† A general reference against the false (though fashionable) philosophy of Mr. Herbert Spencer can be given to the works of Mr. St. George Mivart and his series of articles in the *Dublin Review*, from Oct. 1874 to Jan. 1880. On how far and what sort of evolution is admissible, see in

economists who call themselves inductive, realistic, or historical, and are by no means necessarily involved in any of the misconceptions and fundamental errors of which I have just spoken.

§ 26. The logical error which I have called historical agnosticism is well exemplified in the famous economist Roscher, who in assenting to Mill's 'concrete-deductive' method, makes (besides another) the following proviso: "Every explanation, that is, every satisfactory connecting of the fact to be explained with others that are already clear, is only sufficient provisionally. In proportion as our view is enlarged our explanations must go further. In a hundred years' time, if the science has meanwhile grown, the explanations that satisfy us will be as much looked down upon as we look down on those, for example, of the time before Adam Smith." (*Nationalökonomie*, § 22, note 10.) But Roscher forgets that the rules of right reasoning are the same for every generation; and that we have no right to be satisfied with an 'explanation' (*Erklärung*) which our children may find to be wrong. If there are no sufficient grounds for a conclusion, we may put up with a guess, but not look on a guess as satisfactory. If there are sufficient grounds for a conclusion, this cannot become incorrect by any subsequent discoveries. Some of the explanations before Adam Smith were more reasonable than some of those after him; but in any case we may only look down on them as far as being erroneous; and they can be so only because there is error either in the premises, or reasoning, or both. But such error is no necessity in any field of research: we may often lack a true explanation, but never need accept a false one; and if we use our faculties aright, we shall be able to find, and to find in the field of Economics, many true premises, whence can be deduced many true conclusions.

particular his *Lessons from Nature*, ch. xii-xiv. and the last chapter of his *Genesis of Species*. A popular summary of the theological view of creation (respectively, of the universe) is given in Father Faber's *Creator and Creature*, pp. 429-437, 4th edit. Some recent criticisms on the Spencerian Agnosticism are given in *The Month*, June, July, Aug., Sept. and Nov., 1882.

So much for Roscher in particular. The agnosticism which is common to the entire historical school of economists may perhaps best be summarized in the words of Cossa (*Guida allo studio dell' Econ. Polit.* ch. iv. § 5): "As in law the historical school does not recognize principles of reason which have an absolute and universal value (philosophy of law), but only admits that law which is the organic product of the national conscience, or positive law, so also in economy the new school denies the existence of absolute principles, of ideal types to be conformed to by the economical government of States. It only recognizes a *National Economy*, special to each people and each epoch, and thus linked to the respective *physical, ethnical, and historical* conditions, and to the different degree of their civilization. The pretended general principles are erroneous and incomplete abstractions of the actual circumstances of the particular author's own country. And thus the true historical economist should content himself with describing the various stages of economical civilization and with finding the principles and applications suiting each particular epoch."

It is here sufficient comment to say that whereas human nature and the relations of men and the external world are partly constant, partly variable, the historical school treats them as wholly variable;* and to notice three reasons for this error. First, the excesses and absurdities of most of the economists in the first half of this century, measuring humanity by their own time and locality, and dressing up a ridiculous *homo oeconomicus*, just as in political science Rousseau had dressed up a ridiculous *homme de la nature*, were likely to cause a reaction and an opposite excess, which would see nothing common or 'natural' to all men.†

* Cossa's comments are anything but satisfactory, as might be expected (*cf. supra*, § 9, 17 note). But he notices one good retort: "If Roscher observes that the food of an infant is not fit for an adult, Messedaglia answers that the alimentary function in both is the same, and that it is precisely for physiological science to discover the laws of this function."

† See the excellent articles by Claudio Jannet, in *Le Correspondant* for Sept. 1878 (t. 112, pp. 870 *seq.* 1,062 *seq.*). He well remarks the practical mischievousness of the evolutionary doctrines: the communist might urge that private ownership and family life were mere 'historical categories,' which were to pass by evolution into a community of goods

Secondly, the diversity of views in all parts of Ethics, which has already been noticed (*sup.* § 8a), presents a spectacle likely to put doubt or disbelief in any absolute and universal truth, whether political or economical, into the minds of those who, for lack of true religion or philosophy, are unable rightly to account for this diversity. Thirdly, it is quite true, as we have seen (*sup.* § 5), that according to the diversities of time and place, the moral law requires very different applications and wears very different aspects; and the probable conduct of men both in public and private life is very different. These differences have been the object in our time of special attention through the great (and most fortunate) increase of our knowledge of social life in past times and distant places; and by a natural excess the fundamental resemblances have been ignored or denied. But this denial, if carried to its logical conclusion, would strike at the root of all certitude; and the stores of learning heaped up by the diligence of historical students would be destroyed by the inroads of universal scepticism.

§ 27. The second head of the errors, to which the historical school are liable, relates, not to the denial or neglect of known truths, but to the assumption or assertion of either what is known to be false or of what is not known to be true. This I call historical gnosticism, comprising idle assumptions and illogical conclusions. And here I will again begin with Roscher. This writer has a theory on civilization and prosperity, distinguishing rude times, highly civilized or flourishing times, and falling (or fallen) times; and makes a whole series of assertions concerning their respective characteristics. But those who compare different passages of his *Nationalökonomie* will find the same people at the same time to be in two stages of civilization (*Kulturstufen*). For example, we are told (*ibid.* § 97) that free competition grows with civilization, and diminishes with sinking peoples, as in the later Roman empire. But we have been previously told (*ibid.* § 73) that among almost all peoples, as they passed to

and of wives. I may remark that I doubt whether Sir H. S. Maine knows what is meant in Christian philosophy and theology by the law of nature, and that it differs from the use of the same term by the French 'philosophers' of the eighteenth century.

higher civilization, a mitigation of servitude* has been effected by the public power. But with the growth of competition in ancient Greece and Italy, the said mitigation was not seen ; while one of the grandest examples of it on record was precisely in that later Roman empire which he tells us was a declining time. Again, the United States have a characteristic of 'little civilized' peoples in the lowness of the rent of land ; of 'highly civilized' in the social unrestraint allowed to unmarried girls ; of 'sinking times' in the emancipation of women and frequency of divorce (*cf. ibid.* § 155, 250). In short, his theory of 'civilization' (*Kultur*) is not a logical conclusion from exhaustive observation, but either an incorrect assumption, or else a fallacious inference.† Oppor-
 tune were Whately's warnings (*Introduct. Lectures on Polit. Econ.* pp. 153-157, 4th ed.) against the danger of misapplied learning, and of unconscious theorizing, and that knowledge of facts is no remedy for logical inaccuracy, and that it avails not to pile up building materials if we know not how to build. Nor can Roscher's learning (which is indeed admirable) secure him from the vulgar error of reasoning from specific experience, which Mill in two places in his *System of Logic* (bk. iii. ch. x. § 8, bk. vi. ch. vii.) has held up to deserved reprobation. Thus he says (*Nationalökonomie*, § 84), that everywhere with the advance of civilization the sphere of the aims of the State is enlarged. But this seems a mere rash generalization, affirming universally what he knows (or rather imagines) concerning certain particular nations during certain particular periods. It is quite true that when and where the State undertakes the charge of criminal justice, instead of leaving it to the family corporation or other private bodies, then and there is an increase of its sphere and (let us say) of civilization ; and it is also quite true that the conscription and compulsory education and frequent expropriation, when first introduced, are an increase of the said sphere, and have been largely introduced among nations whom Roscher would call advancing in civilization. But what is the use of such

* This word itself, namely, *Unfreiheit*, is very vague and misleading ; but for the present point it is enough that it includes slavery.

† In like manner he constructs a fancy period, called the mediæval period, not a result of facts, but a shape to which facts must be moulded.

and suchlike particular examples for the establishment of an historical induction, unless he can shew that he has observed a great many cases, and that only few or unimportant ones are unobserved, and that in all those observed he has found the said advance of civilization and enlargement of the sphere of the State to be invariably together? Even then he would not be justified in more than a probable conclusion, namely, that the advance and enlargement aforesaid probably always went together. As it stands, his assertion is preposterous. For not merely is information as yet lacking on the growth of many important civilizations (as the Egyptian, Assyrian, Chinese, Cambodian, and Central American), but in the known cases there are facts contrary to his theory. Instead of the sphere of the State ever growing with civilization (or with what he would call civilization), we see this sphere sometimes indeed growing, but sometimes also shrinking; now taking in a new field, now quitting an old one. Thus against the instances of increased sphere cited above may be set the decreased sphere in regard to the expenditure of the subjects (sumptuary laws), to their lending transactions (usury laws), and to their industrial pursuits (laws prescribing the time, place, and mode of production), as also the rise of great industrial bodies (joint-stock companies), able to perform and performing what once could only be done by Government.* Nor can I see any evidence to prove that in the future there may not be fresh abandonments of fields of action by the State, as well as fresh occupations; or that either or neither will preponderate.

§ 28. The foregoing criticisms have been given to illustrate the logical errors in a leader among historical economists. And as we are concerned here with method and not with theories on social science, it would be out of place to examine how many other 'inductions by simple enumeration' can be found in the pages of Roscher, or to give any detailed criticism of other theories of social evolution. As far as

* Thus by looking only at these facts and using Roscher's fallacious method, we might reach a conclusion just the reverse of his, and proclaim as a law that advancing civilization is marked by the diminution of the sphere of Government. And this, in fact, has been done by Mr. Herbert Spencer (*Principles of Sociology*, § 259 seq.).

they are worth attention they will receive it in their fit place ; while here it is sufficient to notice them incidentally as illustrating the fallacies which I have grouped under the name of historical gnosticism, or the error of setting forth as known what is not known, or even what is false. Perhaps the most striking example of rude empiricism is the roseate theory of certain American economists, who are misled by a narrow-minded observation of their own country, where the conjunction of the arts of the old world with the unexhausted and unoccupied soil of the new, has caused a dazzling increase of wealth. And thus they imagine with the growth of civilization that cultivation is extended to more fertile lands, that capital tends to increase faster than population, that wages tend to rise, and so forth ;* like the logical error of the mercantile school (*inf.* § 36), whose conclusions were likewise drawn, and likewise drawn irrationally, from observation.

Very different from this rude empiricism are the theories which, while nominally based on observation and experience, really mean the subjugation of facts to a preconceived theory. Conspicuous among such is the theory of Mr. Herbert Spencer, which he calls 'super-organic evolution,' being the application to social life of the theory of evolution which he holds to be true in biology, and of which a leading feature is the gradual transition from what he calls indefinite incoherent homogeneity to definite coherent heterogeneity. And, like the unhappy victims of Procrustes, the various social facts as they fall into the hands of Mr. Spencer must be made to fit into the bed of super-organic evolution ; and if they are too long or too short, must be cut down or stretched out. Even Mr. Cliffe Leslie, who bows the knee to Baal and speaks of Mr. Spencer as "the most eminent living social philosopher" (*Hermathena*, No. 4, p. 287), has to differ from him and notice (*Fortnightly Review*, Jan. 1879, pp. 43, 44) that the movement from the homogeneous to the heterogeneous is not an universal law, and that the movement of language, law, and political and civil union is mostly in an opposite direction ; as

* These follies are well noticed by Roscher, *Nationalök.* § 263, note 1 ; who is better as a critic than as a constructor. Analogous follies were held by Banfield in England, and Prittwitz in Germany.

the unification of language in contrast to the perpetual flux of language among the Africans, with whom new dialects arise at each swarm from the parent hive; and the spread of French or English civil law over a great part of the civilized globe; and the unification of dress instead of the old distinctions according to rank, profession, and district; and the modern amalgamations instead of differentiations of employment, as of industrial and political functions, when the same man acts as a merchant in the morning and a legislator in the evening, and where all the able-bodied men have for a portion of their life to be soldiers. Plainly, I may add, Mr. Spencer has not reached his theory of social evolution from the study of social facts, but constrains these to bend to his theory. And he betrays his own ignorance of economical history when, for example, he asserts (*Study of Sociology*, 5th ed. 1876, p. 255) that in early times bondsmen were treated as though they existed simply for the benefit of their owners, and (*ibid.* p. 348) that increase in industrial energy causes diminution of harsh coercion, and that this latter fact is a fundamental trait of social progress. In reality the alleged characteristics of early times can historically be shewn to have been absent when we first get a view of the bondsmen of Greece and Rome, and to have arisen and grown till it became a characteristic of the most brilliant periods, literary, political, and commercial, of the Hellenic and Italian races. And as regards the diminution of harsh coercion, the falsehood of Mr. Spencer's proposition is plain to any one who compares, for example, the treatment of the provincial Roman population in the fifth century by the unindustrious Germanic invaders, with that of the native races during nearly four centuries by European colonists, who assuredly have not been lacking in industrial energy. And precisely the great increase of industrial energy in England under George III. was marked, not by a diminution but by a fearful increase of harsh coercion, and new and unutterable cruelties, as those suffered by the workhouse apprentices, rivalling the worst days of Roman slavery.*

§ 29. The danger of direct refutation, to which Mr.

* Mr. Spencer repeats the errors in question in his *Principles of Sociology*, § 260.

Herbert Spencer exposes himself, can indeed be avoided by confining historical inductions to vague generalities, to truisms, or to tautology. But this is but the mournful alternative of avoiding the sacrifice of truth only by sacrificing what is original and clear. And thus we can say, I think, of many statements of the 'new school' of economists, that if they are interpreted so as to give us information, they lead us into error, and if interpreted so as not to lead us into error, they give us no information. So Brentano (*Arbeitergilden der Gegenwart*, II. p. 311 *seq.*) is at great pains to establish logically the historical law "that in a condition of freedom the dissolution of an old order necessarily in all times calls forth the same organization in guilds of those who suffer under that disorganization." But, as far as this is true, I see nothing but the truism that those men are likely to unite in some form or other whose common interests are threatened, and who are not kept by force from union. Again, Mr. Ingram says: "We can by judicious action modify in their special mode of accomplishment or in the rate of their development, but cannot alter in their fundamental nature the changes which result from the spontaneous tendencies of humanity. An attempt to introduce any social factor which is not essentially conformable to the contemporary civilization, will result, if not in serious disturbance, at least in a mere waste of effort. Any proposal of social action, therefore, should repose on a previous analysis of those spontaneous tendencies, and this is possible only by the historic method." (*Address on Polit. Econ.* pp. 21, 22.) Whereon a long commentary might be written, but mine shall be brief. First, I ask, how does Mr. Ingram *know* that, if there are the said natural processes of national growth and development, we can alter them in the degree alleged? Nor do I understand how we can effect any alteration, if, as Mr. Ingram's great master teaches, we never do and never can determine the cohesions of the psychical states which arouse an action, or, to put it in English, if we have no more real choice as to our thoughts and intentions than a leaf to resist the wind. But let this pass.* Then, secondly, I ask whether the career

* Similarly, Mill tells us (*Logic*, bk. vi. ch. ix. § 1), that "the actions and feelings of human beings in the social state are, no doubt, entirely

of Mahomet was according to the spontaneous tendencies of the Arabs, or negro slavery part of the natural development of the European and negro races, or the laws of succession established by the French Civil Code, or of lending established by the English in India, were changes resulting from the spontaneous tendencies of humanity. To say they were, is a mere arbitrary, if not paradoxical, assertion. To say they were not, is more reasonable ; but then robs Mr. Ingram's proposition of its value, since the spontaneous tendencies are so reduced in importance, and the field for the action of Church and State so greatly widened. Nor do we require telling that legislation cannot alter everything and in any way, and that in the application of the natural law regard must be paid to the history and peculiarities of each particular nation. But I will not accuse Mr. Ingram of burdening us with pompous truisms, for I think he is caught on the other horn of the dilemma, and falls into historical gnosticism. To illustrate the passage already cited, he notices how historical research has shewn in the progress of mankind a natural movement from common to separate ownership of land. I will not quarrel with his mode of stating the historical truth, which we shall have subsequent occasion to examine in detail, but will pass on to his conclusion. "The safe prediction is," he says (*ibid.* p. 22), "that the Swiss *Allmend*, the Russian *Mir*, and other forms of collective ownership, will disappear, and that personal appropriation will become the universal rule. The social destination of property in land, as of every species of wealth, will be increasingly acknowledged and realized in the future ; but that result will be brought about, not through legal institutions, but by the establishment and diffusion of moral convictions." But, to begin with the passage on the social destination of wealth, his assertion, if it means, as I think it does, that we can be sure private owners will more and more governed by psychological and ethological laws." And yet he puts (*ibid.* ch. vi. § 2) among the aims of social science to tell us "by what means any of those effects [which the existing state of a country was likely to produce in the future] might be prevented, modified, or accelerated, or a different class of effects superinduced." But how ! (*cf.* Mivart, *Lessons from Nature*, pp. 120-127, 388, 389, on Mr. Herbert Spencer).

use their property *pro bono publico*, increasing in public spirit, generosity and charity, is so devoid of grounds *à priori* or *à posteriori* that I have not the patience to refute it. The passage on the disappearance of collective ownership is more reasonable, but is still untenable, even though we confine it to land. I do not say that collective ownership will not disappear, but I say that there is not sufficient evidence for declaring this likely, still less certain. Even supposing the progression from collective to individual ownership had been regular and unbroken, and hitherto we had observed no contrary movement; still there would not be evidence for asserting that the movement would go on till all collective ownership had disappeared, and that no contrary movement would set in, or new forms of collective ownership arise suited to changes in social relations and in agricultural art. Still less when we see in our own time so many signs of a contrary movement; the former course of alienation of national and municipal domains checked and even begun to be retraced, acquisition of various industries by Government (railways, telegraphs), and the giant growth of the form of collective ownership represented by joint-stock companies, and already in some cases extended to land; not to speak of the growth of monastic institutions (Belgian and French conventual industries), and the fact that much of the land of England has passed in modern times from the hands of single owners into those of trustees. And thus, concerning the future of land ownership, while I think we can in many points tell what ought to be and can be, I confess I cannot tell what actually will be, and think Mr. Ingram's confident prediction as baseless as that of the Socialists who foretell the 'nationalization' of the land.

§ 30. Indeed the complicated nature of social facts, and the grave difficulties in the way of observation, might warn us of the danger of general conclusions. And, by a noteworthy coincidence, one and the same author, Mr. Herbert Spencer, has warned us of the pitfalls, and yet has himself fallen in again and again.* With his falls we are not now

* In general it can be said that, in his *Principles of Sociology*, he falls into the errors of observation and reasoning exposed in his *Study of Sociology*; but although the 'Study' is by no means an intolerable

concerned, but with his warnings ; and these (amid many incidental misstatements) he gives in nine chapters (iv to xii.) of his *Study of Sociology*, and sums them up in the conclusion. Under 'objective' difficulties or causes of error, he notices (*a*) the extreme untrustworthiness of witnesses from carelessness, fanaticism, or self-interest ; how even, where there is impartial examination, (*b*) there is a very general proneness to assert as facts observed what are really inferences from observation, and (*c*) to observe evidence of certain kinds and not attend to that of opposite kinds much larger in quantity, blinded by exterior trivialities to interior essentials ; how, even where accurate data are accessible, (*d*) their multitudinousness and diffusion in space make it impracticable clearly to grasp them as wholes ; while (*e*) a still greater hindrance to their true apprehension is their unfolding in time, which may take centuries, and can only be grasped by combining in thought multitudinous changes that are slow, involved, and not easy to trace. Under 'subjective' difficulties, he notices how (*f*) automorphic interpretation, that is, using each his own nature to interpret the conduct of others, must indeed be used, but must also be more or less misleading ; (*g*) the frequent want of sufficient intelligence to grasp the conceptions of sociology, complex as they are beyond all others, or to take in the immense variety, both actual and possible, of social life in different times and places ; and how (*h*) our emotions, as fear or hope, hate or love, falsify our conclusions, making us wrongly estimate probability and importance. These distortions of judgment caused by the emotions he treats in detail under different forms of bias, educational, patriotic, of class, political, and theological.

Of the foregoing heads of causes of error, those to which I have prefixed the letters *d*, *e*, and *g*, require to be interpreted with caution. The rest, if not newly discovered or well arranged, are at least clearly put, and are indubitable causes of error. Perhaps the best division is to place the obstacles to generalization under three heads. The difficulty first of obtaining true facts of social life, and then relevant facts, and lastly, of reasoning rightly. The liability to be misled accumulation of sophistry and falsehood, like the 'Principles,' it is well supplied with both.

as to the truth, or true character of facts, has already been sufficiently spoken of (as *a*, *b*, *c*, and *f*), and extends from deliberate falsehood, though various degrees of blind passion, to the more pardonable errors, as of travellers who imagine absent what they see no trace of, or imagine words and actions have the same import as the analogous words and actions in their own country.* The liability to reason illogically from facts has also already received sufficient illustration. There remains the intermediate head of difficulties, the fit selection of facts.

§ 31. Well has Cornewall Lewis observed (*Methods of Observation and Reasoning in Politics*, ch. vii. § 20) on this difficult task, that not all which is true should be recorded; and that the historian must know what is worth observing, and select out of the vast mass of occurrences only those having an important bearing upon the destiny and character of the nation whose story he is relating; and that (*ibid.* § 25) this needful power of seizing the material facts and rejecting the immaterial, requires that he frame in his mind a theory explaining the concatenation of events, and by applying this theory determine which events are material and which immaterial.† Well, too, has Walter Bagehot urged (*Fortnightly*

* "See how various are the statements made respecting any nation in its character and actions by each traveller visiting it. There is a story, apt if not true, of a Frenchman who, having been three weeks here, proposed to write a book on England; who, after three months, found he was not quite ready; and who, after three years, concluded that he knew nothing about it." (*Study of Sociology*, p. 100.) Mr. Spencer proceeds to note the difficulty of comparison, as "every society differs specifically, if not generically, from every other"; and how the "comparisons of our vague and incorrect conceptions concerning one society with our kindred conceptions concerning another society, have always to be taken with the qualification that the comparisons are only partially justifiable, because the compared things are only partially alike in their other traits (pp. 101, 102). Warnings and examples of the errors of travellers are given by Mr. Mivart, *Lessons from Nature*, pp. 90, 91, 93, 136-139, 160; and Mr. Robert Flint, *Antitheistic Theories*, Lecture vii. The rules of historical evidence are no unimportant branch of Logic.

† He remarks that facts must be passed through a succession of sieves of increasing fineness before they are ready for history, as is done to every litigated question before it is submitted to a court; this being the main use of professional advisers, who extract from the mass of statements what is pertinent to the question at issue.

Review, Feb. 1876, pp. 222-224) against what he calls the 'enumerative' or 'all-case' method in Political Economy, that the mere indiscriminate collection of facts has not been the method that has succeeded in physical sciences, but abstractions and hypotheses; that if we waited to reason till the 'facts' as to business, for example, were complete we should wait till the human race expired, as facts are constantly accumulating; that statistics are mere 'scraps of scraps,' and that a complete record of commercial facts, or even one kind of them, is quite hopeless. Similarly, Cairnes opposes (*Character and Logical Method of Polit. Econ.* 2nd ed. pp. 63 *seq.*) in economical science that narrow inductive method, which begins by collecting and classifying all the facts of wealth as presented in actual experience in different countries, as far as they admit of determination; and then using the results as data whereby to rise to the causes and laws governing the facts: a method impotent to solve economical problems, because on the one hand the phenomena of wealth (let us add, like all other social phenomena) are very complicated, the result of a great variety of influences simultaneously operating, and on the other hand there is no power of making those strict scientific experiments, which alone in such cases enables us to establish inductively scientific conclusions. Nor is Mr. Herbert Spencer involved in this excess of induction. He tells us truly, though not originally, that "when a man's knowledge is not in order, the more of it he has the greater will be his confusion of thought" (*Study of Sociol.* p. 267); and remarks, that "the superior intellect, aided by what we may call an intellectual scent, passes by multitudes of unorganizable facts, but quickly detects facts of significance, and takes them in as elements out of which cardinal truths may be elaborated" (*Principles of Sociol.* § 41). Rightly, therefore, he recognizes the need of a selection of facts; rightly, too (*vid. sup.* § 12), the need of a guide through the labyrinth of appearances; only the wrong guide, that doctrine, namely, of evolution, which, like *la nature* a century ago, is now the *ignis fatuus* in social science.* And

* He says, for example, in *The Principles of Sociology*, § 51: "Guided by the doctrine of evolution in general, and by the more special doctrine of mental evolution, we may help ourselves to delineate primitive ideas

thus, besides the distortion of facts to suit his preconceived theory (noticed *sup.* § 28), his 'intellectual scent' perceives only what will fit in with evolution, and the rest must be passed by as 'unorganizable.' Again he is right, though again not original, when he urges, in the last four chapters of *The Study of Sociology*, the need of preliminary discipline for the students of social science; only the wrong discipline, none other, namely, than to be stripped of wisdom and morality by a full acceptance of his own system of philosophy.

§ 32. And now I reach the end of this weary task of criticism, which may seem to some to have been insufficient, to others unnecessary, and in which I fear lest by feeble arguments I may have only strengthened the false positions which I have assailed. But without fear I can say to those who are really in good faith and good dispositions—for in this, as in all branches of the science of right and wrong, it is idle to speak to those whose reason is obscured by pride and passion—that there are two antidotes to the false teaching, both of 'Political Economists' and 'Sociologists': one the study of Christian philosophy, the other the study of history; not of all history, which is impossible, nor of mere crude scraps or of cooked collections, nor, again, anyhow; but a serious examination of the real social life of one or more given countries during one or more given periods. And in the light of reason and reality the delusive light of false systems will disappear.

If any one objects that in attacking the conclusions both of the old and the new economists I have destroyed without rebuilding and have made believe that we can, or at least do, know next to nothing in regard to social science, I answer, that I have opposed historical agnosticism as well as historical gnosticism (*vid. sup.* § 26); that I do not deny the existence of sociological or economical laws in the sense of likelihood of action—indeed Mr. Spencer's formula of change

in some of their leading traits. Having observed *a priori* what must be the character of those ideas, we shall be as far as possible prepared to realize them in imagination, and then to discern them as actually existing." I think he would hardly deny that the volumes entitled *Descriptive Sociology*, published under his direction, are not the basis, but based upon his theory of evolution.

from likeness to unlikeness of parts can, I think, be made true if reduced to a likelihood in certain cases up to a certain point ;—but that such laws are comparatively few and limited, whereas there is an immense body of truth, namely, the moral character of social action, which is ascertainable, and which forms the proper object and main body of social science. In other words, we can tell much as to what has been and what ought to have been, but little as to what must have been ; and in the future also, while we can tell little of what must be and will be, we can tell much of what may be and what ought to be. If, then, we refuse to consider Politics and Economics as branches of Ethics, the field of these sciences is reduced to narrow and uninviting limits : though of political (including juridical) and economical history there is abundance, of science there remains little.* But

* After describing the ‘objective difficulties’ of the social science, Mr. Spencer comes to the natural question : Is it not manifestly impossible that a social science (in his sense of the term) can be framed ? (*Study of Sociology*, 5th edit. p. 111.) His answer is feeble ; he thinks we can know certain general facts left after errors in detail, that, *e.g.*, there was a Feudal System ; and that we can know its traits in their essentials, especially by comparing different contemporary societies, and by noting what witnesses tell us not intentionally, but by implication (*ibid.* p. 112). But students of history know the emptiness and obscurity of ‘general facts’ : *dolus latet in generalibus* ; and how precisely by details we reach the knowledge of real life. Doubly unhappy is his choice of the ‘Feudal System’ as an illustration ; for this vague term is applied in many ways to many and very different states of society ; and anything is clearer than what are its ‘essential traits’ ; while he himself, in the same volume (pp. 256, 257), gives a picture of ‘the baron of feudal days’ that might almost serve for the Comic History of England.—Some excellent remarks against Comte’s historical abstractions, as fetishism, polytheism, monotheism, feudalism, catholicism, and the like, are to be found in Cornewall Lewis’s *Methods of Reasoning and Observation in Politics*, ch. vii. § 24. And Roscher, in the last three sections of his *National-ökonomie*, gives several sensible comments on idle dreams, and rash generalizations, and theories that can neither be proved nor refuted, and notably warns against false analogies and misleading parallels, where, perhaps, trifling resemblances are regarded and radical differences disregarded. This warning might apply to the ‘comparative method’ to which Mr. Spencer (*loc. cit.*) refers us.—But the reason why I cannot recognize Mr. Spencer’s Social Science may be “an absence of faculty complex enough to grasp its complex phenomena” (*ibid.* p. 132).—Mr. Cliffe Leslie evades refutation by a flight into the future. He admits (*Fort-*

against such intolerable limitation I have already said enough (*sup.* § 8). And if asked what guide is to be followed in the difficult task of selection and interpretation of social facts, I can refer to what has already been said (§ 12), and repeat that relation to moral action is the measure of importance, and that our guide is human reason, not in its natural weakness, much less when distorted and darkened, but when disciplined by a good will and enlightened by revelation. *Nisi Dominus aedificaverit domum, in vanum laboraverunt qui aedificant eam.*

nightly Review, Jan. 1879, pp. 45, 46) that the science of society will not yet enable us to predict, but says it is in its youth and has a long and arduous future before it. His victim, Mr. Lowe, might turn on him and ask how he *knows* this.

CHAPTER III.

ECONOMICAL LITERATURE.

General Remarks, § 33—Antiquity, § 34—Middle Ages, § 35—Mercantile Period, § 36—Physiocrat Period, § 37—Adam Smith and the Industrial School, § 38, 39—Revolt against this School, § 40—Five Divisions of Modern Economists, § 41–45—Conclusion, § 46.

§ 33. In this chapter I do not propose to give a detailed history of economical science, for this would exceed the limits of a volume; nor even an outline, for this would require the existence of a good and trustworthy history to draw from, or the knowledge that would be sufficient to compose such a history; and both fail me: but only to give fragments of an outline, hoping that others with the gifts and acquirements requisite for literary or doctrinal history (*Dogmengeschichte*) may undertake this arduous but useful task. And in much I follow the Historical Introduction which forms the second part of Luigi Cossa's *Guida allo studio dell' Economia Politica*, to which I give once for all a general reference, but also the warning that this lively, clear, and learned Introduction is likely much to mislead us, through the author's errors on the nature and method of the science (*vid. sup.* § 9, 17 note); through his implication that what is only one school of Economics is the entire science; and through his strange omissions, saying nothing of the most important economical writer of modern France, namely, Le Play, nor of the great school of Scientific socialism based on the works of Lassalle and Karl Marx. And thus the greatest caution is needed in following Cossa in his judgments of doctrines and books, and all the more because his style is so attractive.

From what has been already said upon the character

of economical, and no less of political science (§ 5, 12), it is plain that both must be progressive, in the sense that fresh matter for them is continually accumulating. If, indeed, historical erudition were failing, these sciences would be like a spot of sunlight, ever illuminating fresh matter, but also ever letting old matter sink back into the darkness of the past. And in times when there is little change in home life and industry, in laws and government, and little increase in knowledge of previous or contemporary societies, there is little increase of the field for social science. On the other hand, the increase is very great when, as in the century from 1780 to 1880, there occur, in triple conjunction, immense changes in economical and political constitutions, an unveiling of much of the life of past societies, and a great enlargement of our knowledge of existing nations. But the social science is not new because it has received so much fresh matter upon which to work, as botany would not be made a new science by changes in the flora of a country, or by the discovery of new countries with plants as yet unknown. Nor, again, is ancient social science wrong because, in comparison with modern, its field is narrow; for it is not few but false premises that are a necessary cause of error; and the moderns have, in fact, fallen a prey both to false premises and wrong reasoning more than the ancients. Thus it is no mistake for Aristotle to say nothing of credit-payments in an age that had no experience except of cash-payments. But, also, it is plain that of two writers equal in correctness of principles and reasoning, the second is a better teacher in Politics and Economics than the first, as being able to impart more truth, provided naturally that in the interval the writings and social history of the past have in no way fallen into oblivion.

And now, as even fragments require some order, I will suggest six periods for provisional use: Antiquity, the Middle Ages, the Mercantile Period, the Physiocrat Period, the Reign of Adam Smith, and the New or Anarchical Period in which we live. And I look only to Western as opposed to Oriental Literatures. Whether these may not contain a treasure of economical works, I can neither say nor search.

§ 34. The loss of most of the literature of classical Greece and Rome makes it impossible to give any complete account like that which laborious students can give of more recent literature, especially since the invention of printing. But we must not think that Politics and Economics were less studied of old than now because we have so small a remnant of the ancient writings in our hands.

In the most active literary period of Greece, and the same may be said of Rome, industrial life was much simpler than our own, for many reasons, notably through the presence of slavery, the absence or unimportance of commercial credit, the undeveloped and unchanging condition of manufactures, and the performance by women at home of a great part of the textile industries. Nor was the field for Economics enlarged by scientific history; for this was absent. Thus Thucydides, a model in the history of his own times, could no more appreciate the Homeric Age than Hume or Gibbon could appreciate what are called the Middle Ages. But though the field for Economics was narrow it was well cultivated; several good economical discussions are to be found in Plato, especially in his *Laws*; the *Oeconomicus* of Xenophon is, as far as it goes, an excellent treatise, and there are other economical writings by this author of no small merit; while, above all, Aristotle, besides treating many special questions with light and skill, has the great merit of mapping out the field of social science and putting Economics in their right place;* and though by no means free from errors, even grave errors, takes the first place among the ancient economists.

Less important and still more fragmentary is what is to be found on Economics in the remains of the classical Latin literature; but the detached economical remarks in Cicero and Seneca, in the *Natural History* of Pliny, and in the writers on agriculture (*scriptores rei rusticae*), are signs that interest was taken and knowledge possessed in various departments of economical science; above all, the fragments preserved of the classical Roman jurists, notably in the

* Whether, indeed, he was the first to make the triple division into Ethics, Politics, and Economics, cannot, I suppose, be affirmed for certain; and Xenophon had in a measure anticipated it in the three works the *Memorabilia*, the *Cyropaedia*, and the *Oeconomicus*.

Digest, shew how these writers, who perhaps deserve the highest rank in ancient Latin literature, were familiar with economical problems, as for example Paulus in his celebrated passage on money (*Digest*, l. 18, tit. 1, 1).

§ 35. The light of Christianity, and the new relations arising as slavery withered away, gave a wider field for economical science. But while I know that an extensive literature, mainly in Greek, but partly in Latin and the Oriental languages, arose, much of which is still extant, and that a Christian and civilized state lasted in imperial proportions from the fourth till the eleventh century, I confess that of the economical writings of this long period—and it is incredible that they were absent—I know next to nothing; though, indeed, on the nature, limits, and responsibilities of ownership, on almsgiving and lending, on the duty and dignity of labour, on the fit relations of masters to servants or workmen, on expenditure and luxury, and on family life, I could refer to excellent passages in the Fathers. I can only hope that the vast field of patristic and Byzantine literature may tempt, if it has not already tempted, the students of the history of Economics. But at present, being aware of my own ignorance, I can at least altogether decline to skip lightly, like Cossa, from Antiquity to the Middle Ages, or fill up the interval with darkness and barbarism, as though, because these overspread some places, they overspread all.

The Middle Ages, in the sense of Catholic Europe from the middle of the eleventh to the beginning of the sixteenth century, began with a revival of material prosperity and political strength, just when these were being ruined in the Christian East; and there followed a revival of studies, which, however, were perhaps little directed towards economical science till the thirteenth century, when the Ethics and Politics of Aristotle were first known—or well known. Yet even in the twelfth century some points of the science were well treated by our countryman, John of Salisbury († 1180), who was well aware of what moderns would call the 'organic' connection of the different members of the social body, and whose noble words on the mutual duties of the upper and lower classes may be used to this day to rebuke the preachers

of mutual independence and competition.* In the thirteenth century economical science rose to a higher level than would have been possible in pagan antiquity; Aristotle was understood, corrected, and supplemented; and if, through the simplicity of mediaeval life, and the absence of historical erudition, the science was less in extent than later, it was also less involved in error. The stream of wisdom flowed in three principal channels. One was that of moral theology, great portions of which are by their nature much the same as social science, only that the common subject-matter, namely, human action, is looked on from a purely supernatural point of view. The second channel was the majestic body of the Canon Law (*corpus juris canonici*), so far as it dealt with economical relations (as marriage, testaments, successions, sales, leases, and land-tenure, wages, usury, etc.), together with the commentaries on it. The third channel was in the shape of commentaries on the Ethics and Politics of Aristotle, and separate treatises on Politics, wherein not a little of Economics was very naturally included. A vast field is here open to literary students far more profitable than that of the writings of later economists, and far less explored.† Here I will but notice, besides Albert the Great, and St. Thomas, who illuminates whatever he approaches, the names of Egidio Colonna, John Buridan, Nicolas Oresme (whose admirable work on money has been well edited by Wolowski, Paris, 1864), John Gerson, and, in the middle of the fifteenth century, St. Bernardino of Siena and St. Antoninus of Florence. The two latter had an advantage over earlier writers in having a wider field for their science, as they lived in a country flourishing with wealth, industry, and commerce.‡

* *Polycraticus*, l. vi. c. 20. Tunc autem totius reipublicae salus incolumis praeclaraque erit, si superiora membra se impendant inferioribus, et inferiora superioribus pari jure respondeant, ut singula sint quasi aliorum ad invicem membra, et in eo sibi quisque maxime credat esse consultum, in quo aliis utilius noverit esse prospectum.

† Naturally such explorers must have better preparation and principles than Roscher or Endemann, who have darkened rather than lit up mediaeval economical literature.

‡ See on them an interesting article by Funk in the *Tübingen Zeitschrift für die gesammte Staatswissenschaft*, 1869, pp. 125 *seq.*, though the author must not be blindly followed. The doctrines of the earlier

And now, before looking at the periods of illusion or anarchy, let us notice that, though the Middle Ages ended, the three channels above-named were not stopped up; and those acquainted with the theological literature of the sixteenth, seventeenth, and eighteenth centuries may be able to point to a continuance of true economical teaching, handing down in this department of knowledge the true doctrine of reason and revelation, just as in other departments the theologians defended the truth against arch-rebels, like Luther in theology, and Descartes in philosophy.

§ 36. The Mercantile Period can serve as a title for the times between the decline of the Christian view of Politics and Economics, and the rise of the brilliant system of the Physiocrats. In Economics it is a period rather of monographs than of regular treatises; but in Politics there were many and famous systematic works, and in these much was discussed that might fall under Economics. Thus, in the sixteenth century, Botero and Gregory of Toulouse maintained the Christian tradition against the revived paganism of which Macchiavelli had been so conspicuous an example, and from which their contemporaries, Mariana and Bodin, were not free. Thus, also, we should notice, as important economically, the series of famous Protestant jurists, as Grotius, Pufendorf, Thomasius, and Christian Wolff, who, with many philosophical and still more theological failings, yet shine when compared with the French philosophers who took their place. But now let us look, omitting lists of authors and treatises on particular subjects, at the main economical product of this period, namely, at a body of doctrine not concerning the whole science, but the part concerning the economical action of the State, especially in relation to commerce. This body of doctrine was later called the Mercantile System, or Colbertism, and, perhaps, Serra in Italy, De Montchrétien in France, and Thomas Mun in England, may be looked on as

writers are set forth with great clearness and erudition in an excellent study of some ninety pages by Victor Brants, *Les débuts de la science économique dans les écoles françaises aux XIII.^e et XIV.^e siècles*. Louvain, 1881. We find a number of doctrines supposed to be modern discoveries perfectly understood, with this difference, that instead of being scattered and isolated fragments of knowledge, each is in its place in the arch that bridges over the gulf of ignorance.

its three most conspicuous exponents. Looking to the appearances of the world with which they were familiar, and seeing how commercial and political greatness belonged as a fact to those countries wherein the money in circulation was abundant, the economists, whom we call the Mercantile School, imagined that the economical well-being of a State is in proportion to the amount of the precious metals circulating within it, and that, in consequence, to preserve and increase this amount to the utmost, is the fundamental rule of economical policy. But (with some rare exceptions) they by no means held the error often attributed to them, that wealth consists in money alone ; nor even can they be charged with making light of agriculture, and wishing it neglected in comparison with manufactures and commerce. On the means to carry out their fundamental rule, and make abundant the money in circulation, they were not all agreed. Some approved severe laws against the exportation of gold and silver. Others disapproved them, and sought their end with more subtlety, wishing to increase exports and lessen imports, in order that the balance might be paid in money ; and to effect the imports and exports as desired, they recommended various measures, as prohibitive duties on the importation of foreign manufactures ; permission, or even encouragement, of the importation of raw material, which could be worked up at home and then re-exported at a much larger sum than it had cost ; permission of the importation of food for the common people, that wages might be low, and thus the 'cost' of production less against foreign competitors ; giving grants (bounties) upon the exportation of home manufactures ; a 'colonial system,' whereby the mother country was to have the monopoly of the colonial market for its manufactures, and the colonies were in return to have special advantages for the sale of their raw material in the market of the mother country ; and commercial treaties, aiming at favours to goods and merchants not granted to other nations.

On the merits and demerits of this theory, for it has both, the place to speak will be in the discussion on foreign trade ; and let us only say, that it was right in thinking there was a connection between abundant money and lively commerce,

but wrong in thinking the one was the cause of the other. Here I wish rather to suggest that the characteristic of this period, applying alike to the upholders and opponents of the mercantile system, was the desertion of the old subordination of Economics to Ethics, and making their Economics nothing less than Chrematistics; that is, no longer looking to moral welfare and the science of right action in a given department, but to the art of acquiring and preserving national wealth, or of filling the coffers of an unrighteous king. Nor is it any wonder that in the eighteenth century, with the rapid decline of reason and religion, the princes of the continent were well pleased to have each at his side an economical Macchiavelli, and to found chairs to teach the art of national wealth. No doubt this period witnessed such a growth of colonies and dependencies, of commerce and manufactures, of complicated methods of private credit and public finance, that its economists are likely to afford more historical information and grounds for conclusions applicable to our own times than the mediaeval economists; but, on the other hand, they shew a lamentable falling off as regards fundamental truths; and to those who would use them, not as sources for history, but as teachers of truth, are but store-houses of error. And the like may be said of the two economical schools to which I now turn, and which were founded, the one by Quesnay, the other by Adam Smith.

§ 37. The system of the French writers known as the Physiocrats, or Economists pre-eminently, was sudden and short-lived, unlike the gradual growth and long continuance of the Mercantile Theory; and although it was so far an improvement in being no isolated doctrine or heap of fragments, but a well-ordered system, and rightly made Economics (unless I am mistaken) a part of Ethics; it was yet worse than what had gone before, because its ethical principles were thoroughly bad, just as the modern sociologists, like Mr. Herbert Spencer, are worse than the economists who went before them, like Senior or McCulloch. The Physiocrats, so called from their urging the rule of Nature (*κράτησις τῆς φύσεως*), held the world to be governed by immutable laws, physical and moral, constituting the natural law, which had to be obeyed under terrible penalties, and which positive law,

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whereof the two main institutions were liberty and property, must not be allowed to oppose. As to the production of wealth, territorial industry, they said, is alone productive, that is, alone yields a net produce (*produit net*), or surplus, after meeting all expenses of cultivation. This surplus is at the disposition of the cultivator after deducting from it the rent taken by the landlord, and the taxes taken by the State. Manufactures, on the other hand, transforming the raw material provided by territorial industry, though useful and necessary, produce no new object, only adding to the value of pre-existing objects as much as has been spent in working upon them, including the maintenance of the workers ; nor will competition suffer these to obtain any higher price, or, if they do, as by some privilege from Government, they obtain it only at the cost to the agriculturists and landowners of an equivalent amount. Manufactures, therefore, and commerce, are sterile. The increase of a country's wealth is not in money, which is simply an instrument of exchange, but in the abundance of the products of its soil ; and the inhabitants can be grouped in the triple division of the *productive* class of cultivators, the *disposable* class of landowners, who do not labour, and the *sterile* class, comprising all the rest. And the right economical policy is to abolish all restriction and regulations of agriculture as well as of manufactures and commerce, all real and personal servitudes (rent services and charges, rights of common), all corporations, all monopolies ; to multiply roads, to spread instruction, to encourage agriculture by prizes ; and as every burden must ultimately fall on the *produit net*, or agricultural surplus, to abolish all indirect taxes, and to put in their place a direct tax on rent.

This economical system was received in France with enthusiasm. Opponents, indeed, were not wanting, and the Mercantile System was not overthrown by it ; but still it deserves to give its name to the period between the publication of Quesnay's *Tableau Economique*, in 1758, and Adam Smith's *Wealth of Nations*, in 1776. Comment upon it can here be brief. So far as it opposed the mercantile theory of money, it was a return to a wiser past ; but this was set off by the new error of the unproductiveness of manufactures. Graver, and not yet extinct, was the error of imagining a

beneficent order of nature altogether different from the Providential guidance of the world's history, and not even, I imagine, referred back to God—an order which, if followed, would give the maximum of temporal happiness, and which men, who were all by nature equal and good, would naturally follow, were they not hindered by authorities and associations, which stood in the way of individual action and development. Whence it followed that all associations, bodies, organizations, should be dissolved, and that the economical maxim of government should be *laissez faire, laissez passer*. And thus those who care to use the terms may say that the Physiocrats were involved in economical Liberalism, or Individualism, or Atomism. They would not hear of man being a fallen creature, oppressed with ignorance and concupiscence, but painted him in absurdly bright colours, and then, to account for the undeniable evils of social life, had to paint him, when in union with his fellow-men, or in authority over him, as a combination of malice and stupidity.

Among the followers of Quesnay perhaps the most characteristic was Mercier de la Rivière, and the most famous was Turgot, who, in his character of statesman, put in practice some of his economical doctrines, notably by his attack on the trade guilds of France. The opponents of the Physiocrats, though often just in their criticisms, were in the main either apologists of the mercantile system (as Genovesi) or eclectics combining the '*produit net*' with the 'balance of trade,' or recommending that home trade be let alone and foreign trade regulated. Much more thorough and commendable was the opposition raised in Germany by Justus Möser against the cosmopolitan and unhistorical liberalism, both political and economical, which was the almost irresistible delusion of the time; and though he could not stem the current of folly, he was the precursor, if not the father, of the historical school of jurisprudence.

§ 38. The image of Adam Smith is obscured by the incense of his worshippers; and to judge him in a single section may seem a profanation. But none the less he must here be judged, and with brevity. First (*a*) let us admire his wide and intelligent observation of the society in which he lived, so that *The Wealth of Nations* is a storehouse of

information on the time when it was written ; and (*b*) his talent and wit, lighting up dull arguments with apt illustrations, pointed sarcasms, and bright gleams of humour, besides shewing great powers of close reasoning. Then (*c*) he had the merit of treating economical questions, not as scattered and unconnected, but as part of a system, and intimately connected with Politics ; though in this he did but follow the Physiocrats, who in their turn were not original in being systematic. Similarly, (*d*) like them, he is formally right, though not original, in making Economics a part of Ethics, for he divides Moral Philosophy into four parts—Natural Theology, Ethics in the strict sense, Political Law, and Political Economy. But (*e*) he surpasses the Physiocrats inasmuch as they had only attacked, but he overthrew, the Mercantile System, and also (*f*) in many subordinate portions of Economics has given true teachings. Nor do I much heed the charges of plagiarism (as by Karl Marx), since it may be as meritorious to make truth accepted as to discover it. As regards the logical method of Economics, modern disputants claim Adam Smith, and praise him extravagantly as having followed, each say, their own method, when in reality (*g*) he is inconsistent, habitually assuming the motive of pecuniary self-interest as the sole one in economical life, and raising an edifice of sophistry on this foundation of falsehood ; but is much too wide-minded and too keen an observer of real life to press this assumption to all its logical consequences, and thus from time to time well recognizes the influences of other motives, and in his discussion on the expense of defence (Bk. V. Ch. I. Part I.), shews himself capable of using the right method, which, as we have seen (*sup.* § 12), is the same for Politics as for Economics. As regards the teaching of the science, (*h*) he is defective by the lack of definitions, by his loose and shifting terms, by his repetitions, lengthy digressions, and illogical arrangement, and by the omission of several important departments, as of population. Moreover, (*j*) he is involved in confusion, not only, as we have seen, in regard to method, but also, as we shall see later (*inf.* § 262), in regard to several fundamental notions of the science, for example, assimilating ‘labouring servants’ and ‘labouring

cattle,' instead of marking that 'maintenance' of the latter is outlay; of the former, return for outlay. (*k*) He was also involved in the error of the Physiocrats on natural and beneficent liberty, perversely checked by stupid or malignant authorities. For he assumed that men were born equal, the other extreme to the modern exaggeration of hereditary diversity; and attributing most economical evils to the artificial organization introduced by authorities (civil or religious), imagined the remedy was in the removal of all restrictions, and recommended *a priori* as an ideal the 'system of natural liberty,' that is, economical lawlessness: being the counterpart of Rousseau's political doctrines. And both writers won immense popularity by this 'Liberalism,' which suited the fashionable doctrines in theology and philosophy, the justifiable discontent at many antiquated restrictions, and at institutions that refused a due share in political and industrial government to an intelligent and rising class.* But notice that here again Adam Smith had at least sense to be inconsistent and occasionally to allow 'a violation of natural liberty,' and not become, like some of his followers, a ridiculous, because consistent, advocate of *laissez faire*. But let us turn to the deeper foundation of his economical views and denounce him as (*l*) the teacher of immorality, egotism, and impiety. Not merely false, but detestable is his palliation of unchastity (Bk. V. Ch. I. Pt. 3, Art. 3), and his glorification of pride, sensuality and revenge (*Ibid.* Art. 2, pp. 346, 347, ed. McCulloch). He was a true rationalist in his scorn of the uneducated and his denunciation of the noblest aspirations of man as the 'delusions of enthusiasm and superstition' (*Ibid.*). He crouched on the earth and imagined all high motives, and still more, all supernatural life, which he had lost the capacity to understand, to be but the delusion of fanaticism or the artifice of hypocrisy. In like manner he imagined that happiness in this life was inconsistent with the practice of Christian asceticism; and this without the sorry excuse of being a man of the world; for he was a teacher of moral philosophy.

* The criticism I have marked (*k*), is to be found more in detail in L. Brentano, *Die Arbeitergilden der Gegenwart*, ii. pp. 50, 150, 162 *seq.*, 321, and note 350.

Nor is it of any avail to appeal, if, indeed, such appeals can be allowed, from the repulsive ethical standpoint of *The Wealth of Nations* to that of his previous work, *The Theory of Moral Sentiments*, which makes sympathy not self-love the foundation of moral judgment and moral action. For it may be well questioned whether his doctrine of sympathy cannot be resolved, in spite of his protests, into an egotism, which is none the less egotistical because decorous and highly refined, and is none the less odious because exchanging rude and simple selfishness for an elaborate code of human respect.* And then, without question, *The Theory of Moral Sentiments* is one among the various theories of empirical Ethics; and thus, besides its own especial characteristics of insufficiency, equivocation, and inconsistency,† strikes, in common with the aforementioned theories, at the root of morality, reduces Ethics to the mere science of propriety or convenience, removes all higher motives of action, all higher standards of moral perfection, and does all this in order to escape the unwelcome necessity of resting morality upon the knowledge, and service, and love of Almighty God. And now, passing by (*m*) his other philosophical delusions and his blind worship of Hume,‡ I will mark as a final criticism (*n*) his travesty of history, which may well awaken our indignation and disgust. Pardonable, indeed, in that unhistorical age are many and grave errors (as that feudal anarchy prevailed under the Plantagenets, or that mediæval villeins were tenants at will); but unpardonable is the cynical picture he draws (Bk. III. Ch. II-IV.) of economical history unfolded by the action of crafty or of stupid

§ "If man only acts virtuously, because others sympathize with his virtuous actions, and if the sense of duty is nothing more than the consciousness of wishing to excite sympathy on the part of others by one's actions; then all moral philosophy is but a science of shrewdness (*Klugheitslehre*) for refined egotists, and this is in admirable harmony with Adam Smith's views of Political Economy." Hildebrand, cited by H. Rösler, *Ueber die Grundlehren der von Adam Smith begründeten Volkswirtschaftstheorie*, 2nd edit. p. 33. I may add that Rösler's attack on Adam Smith, though good in some points, appears to me spoilt by several serious errors.

† So much can be gathered even from the latest admirer of Adam Smith's Ethics, namely, Mr. J. Farrer, *Adam Smith*, 1881, pp. 188 seq.

‡ See Karl Marx, *Das Kapital*, 2nd ed. ch. xxi. note 76.

greed, of envy and vanity, varied with outbursts of fanaticism, as the 'destructive frenzy' of the Crusades. And his sketch of the progress of religion and education (Bk. V. Ch. I. Part 3, Art. 3) is still more senseless and repulsive. Rightly, then, can he claim honour from those who still in their blind hatred of religion teach falsehood in philosophy and history; and he deserves, like Voltaire and Rousseau, like Gibbon and Hume, to fill a niche in the temple of impiety.

§ 39. The doctrines of Adam Smith spread rapidly through the Western world, as might have been expected from their thorough conformity to the spirit of the time (§ 38, *ad k*), and also from the political revolutions in Europe and America and the economical revolution which was started in England by a series of discoveries in the arts at the very period when *The Wealth of Nations* was published. For anarchical doctrines are suited to an age of revolution. Moreover, Adam Smith can be said to have founded an economical school whose doctrines may, perhaps, be called the Industrial System from making labour the one source of wealth or of value; only we must remember that the leading practical recommendation given by the master and his disciples, namely, to sweep away all economical restrictions and safeguards, was derived from the Physiocrats; so that were I to make their special doctrine the ground of classification, and to speak of the school of economical Liberalism or Individualism, I should have to say that the founder was not Adam Smith, but Quesnay.*

* The notion that Adam Smith was the founder of economical science is amusing by its naive ignorance. Much more likely to mislead is the notion of Roscher (approved by Cossa), that he was, as it were, in the centre of the history of the science, so that all that was written before him can be considered as preparatory, and all after him as supplementary. This could only be said if he had fallen into *no fundamental* errors, and if he had first discovered or set in order *all the fundamental* truths of the science: both utterly untrue suppositions. In reality, Adam Smith was only the founder of one school of Economics, and that a bad one; and his system deserves the uncouth name it has received in Germany, of 'Smithianismus.' It may be here noticed that Roscher (*Geschichte der Nationalökonomik*, p. 484) greatly underrates the obligations of Adam Smith to the Physiocrats; whereas Scheel (in his article on Turgot, in the *Tübingen Zeitsch. für die gesamte Staatswis.* 1868) falls into an

The Industrial School may perhaps be said to have been supreme for sixty years ; and on the followers of Adam Smith during that period let it suffice to say briefly that none rose to the level of their master ; that while they, indeed, corrected certain mistakes into which he had fallen, and added a considerable body of doctrine on points which he had neglected, they sometimes corrected him where he was right, and added what was mainly superfluous or incorrect ; and that following him in the two errors of the false *à priori* method, and the advocacy of lawlessness, they framed a system of 'orthodox Political Economy,' lacking the wit to imitate his inconsistency in error. In England there is, I think, one special feature in the fortunes of economical literature, that the great reaction among the upper classes against the frivolous impiety of the eighteenth century did not affect the dominion of the purely economical doctrines of Adam Smith, which were saved by a compromise separating Economics from Ethics, that is, imagining there was a body of doctrine as to wealth discovered by Adam Smith and perfected by his followers, called Political Economy, which could no more be subordinate to, or in conflict with, Political Science or Morality, than could the physical sciences. From this convenient error came the possibility of Protestant clergymen being among the leading professors of the 'new science,' of which the reputed founder was a scoffer.

Turning to the particular economists who were the followers of Adam Smith during his supremacy, I will but name six : Bentham, the apologist of usury ; Malthus, who was also an utilitarian, and whose *Essay on Population* (1798) was perhaps the weakest book that ever bore an European renown, while his subsequent writings were weak without being renowned ; * Ricardo, who also has enjoyed a renown

opposite exaggeration, thinking that Adam Smith, whom he depreciates, was as much a Physiocrat as Turgot, whom he exalts, and imagining that social science was created by the Physiocrats !

* If we are to trust Karl Marx (*Das Kapital*), 2nd edit. pp. 364, 529, 641, 673), the *Essay on Population* was a plagiarism from Sir James Steuart, Townsend, and Wallace ; nor, again, was Malthus a discoverer of the doctrine of rent, but took it (in 1815) from James Anderson, who

singularly out of proportion to his deserts, reasoning from arbitrary and false assumptions, and, moreover, involved in ambiguity and contradiction ;* Say, the clear exponent and French mouthpiece of Adam Smith, and who, though exaggerating the doctrine of lawlessness, and involved in some particular errors of his own, at least avoided the grosser abuses of the deductive method, and the fictitious isolation of economical questions ; Storch, the German who spread in French through Russia the English economical doctrines ; and lastly Rau, the famous professor at Heidelberg, who as an economical writer probably deserves a far higher place than any of the five others, and whose book ruled in Germany for twenty-eight years (1826-1854) without any serious competitor.

§ 40. Opponents of the Industrial School were not wanting during the time of its supremacy. In 1819 Sismondi began to raise the voice of humanitarian criticism ; but for this the times were not yet ripe. In the period of the Restoration in France the early Socialists, of whom St. Simon and Fourier were the most conspicuous, were active, enthusiastic, and not without intelligence ; but yet may be classed as dreamers without serious influence on economical science and practice, unlike the later Socialists. Two illustrious German writers, Adam Müller and Von Haller, were arch-enemies of irreligious liberalism whether in the political or economical field ; but they wrote before the delusiveness of the prevailing doctrines had become clear, and, moreover, I think, failed to distinguish rightly between what was bad and what was new, between institutions which were always requisite for right economical life, and those which according to circum-

started it in 1777, and repeated it in subsequent writings ; whereas West (also in 1815) really did reach it independently of Anderson. Further details on Malthus are to be found in Appendix D.

* Mr. Cliffe Leslie, though a votary of Adam Smith, meritoriously hacks down the idol of Ricardo. See, for example, *The Fortnightly Review*, Jan. 1879, pp. 25, 26. Those who care for a more detailed criticism can find it in Adolf Held, *Sozialismus, Sozialdemokratie und Sozialpolitik*, pp. 47-68 ; who has, I may add, some good criticisms upon Bentham (*ibid.* pp. 80, 95-97). Only, in both cases, let us remember that the critic is himself a worshipper of the State. And I think he is much too violent and probably unfair in his attack on the person of Ricardo.

stances might be beneficial or injurious. Thus we may say that the fourth decade of this century was more than half completed, and intellectual Europe was still bound by the chains of economical liberalism which Quesnay had forged and Adam Smith had riveted. But an age of anarchy in the science was at hand, and successful revolts have reduced the once dominant 'Political Economy' to be but one among several competitors. And the main causes of this change, or some of them, seem to me to be the following:—First, the consciousness of the dreadful evils to which the lower classes were liable when the institutions which protected them were swept away by so-called industrial liberty. England, which had been, like Holland before and Venice still earlier, the model country for economists, was unveiled; and the horrors disclosed, especially by the Reports of Royal Commissioners (as those of 1842 and 1843 on the Employment of Children), were told through France and Germany, not losing anything by the telling. Secondly, the break of the former alliance between the lower classes and those immediately above them when these, by the French Revolution of 1830 and the English Reform Bill of 1832, had triumphed over the old ruling classes. For the delusions of the proletariat were soon rudely dispelled, and instead of the golden age that had been expected, it was found that the new rulers had in a great measure both obtained the power and thrown off the responsibilities of the old rulers. Thirdly, the growth of the sentiment and doctrine of nationality, unlike the cosmopolitan spirit that had gone before. Fourthly, the increased study of history and the growth of historical knowledge, especially in Germany, where already the abstract and subjective philosophy of Kant and Fichte had given place in the department of jurisprudence to the Historical School, and, in higher branches of philosophy, to Schelling and Hegel. And it was found that the realities of the past, no less than of the present, were inconsistent with the prevailing economical doctrines. Lastly, the revival of the religious spirit, which made it gradually possible to expose and attack with success the irreligious parts of the Industrial System. Thus the period of anarchy and division set in, intensified by national distinctions, and to this day economists are in hot dispute as

to the very foundation of their science, and the best writers of one nation are sometimes unknown to that of another.

In this confusion it is very difficult to make any satisfactory classification of modern economists, even supposing an acquaintance with their writings far greater than I possess. For not merely are they very numerous, and with an immense variety of views, but these are so interwoven that to separate the authors and put them under distinct schools is no easy task. But as some sort of division is necessary, I will roughly and provisionally distinguish five schools or divisions, though I fear some economists of note may not distinctly find their place in any of them.

§ 41. For the first division I can find no better title than *Neo-Industrial*, nor better description than to call it the liberal-cosmopolitan-unhistorical school; for it is nothing less than a continuation of the Industrial School, with this difference, that it has been compelled to become apologetic and defend its doctrines against attacks, especially on the part of the Socialists. And thus where Socialism has been particularly dreaded we see economical optimism prevalent among the Neo-Industrialists, making out for the lower classes a miserable past, a happy present, and a golden future. Thus in France the noted Bastiat, a master in economical frivolity, had to sacrifice the sterner doctrines of Malthus and Ricardo in his refutation of the Socialists. Thus optimism has been a characteristic of the so-called Manchester school in Germany, of whom the most noted for his practical activity is Schulze-Delitzsch. But in England Neo-Industrialism cannot be said to have yielded, as in France and Germany, to puerile optimism; Cairnes, its most consistent champion, has treated Bastiat with just severity; and he does not conceal his gloomy view regarding the lower classes. The fundamental errors of the Neo-Industrialists on the nature and method of Economics have already been discussed (§§6-10, 14-21, 23, 24). Here let a word be added on John Stuart Mill, whose work, *The Principles of Political Economy* (first published in 1848), can alone, with *The Wealth of Nations*, claim amid English economical literature the title of a work of genius. It is true that he is involved in self-contradiction; but this is better than narrow consistency in error. It is true that he is

not historical ; but at least he avoids the errors of the Historical School. It is true that his view of Government is defective, and of liberty incoherent ; but this is better than German Caesarism and State worship. It is true that his philosophy is wrong in general, and in particular that his ethical system is rotten ; but he is not a scoffer, like Adam Smith, nor a self-blinded and furious opponent of truth, like some modern writers ; nor, on the other hand, does he disgust us, like some economists, with prating and preaching on our moral duties, as though they were our Doctors and Pontiffs ; moreover, some of his particular ethical views are better than his ethical system ; and his generous, world-wide sympathies were almost Christian, and in honourable contrast to that dreadful hatred between races which seems, not without connection with the current views on natural selection, to be on the increase. And thus, though no follower of Mill, I will not join the ranks of his scornful critics.*

Among the Neo-Industrialists can be placed, I think, the majority of those economists who, in seeking or setting forth economical doctrines, make great use of mathematics. Enough has already (§ 24) been said on this mathematical method, and here let us only notice that it can be used, although it need not be, in any of the five classes into which I have divided modern economists, but that those among the Historical and Ethical Schools are less likely to use it, who care for the realities of life, and who are genuine students of human society in the past or the present.†

* Roscher, in his *Geschichte der National-Oekonomie in Deutschland*, pp. 1011, 1012, fails to appreciate Mill rightly.

† I will not venture to classify Mr. Jevons, who by his vigorous protest against "the Ricardo-Mill school" shews that he would not like to be reckoned among the Neo-Industrialists. In the Preface and first Appendix to the second edition of his *Theory of Political Economy*, he gives an account of what he calls "mathematico-economic" works. Naturally he judges authors according as they have been more or less near his own logical and ethical views ; and, as these are distorted, so also is his view of economical literature. It is a sort of *reductio ad absurdum* when he says that J. S. Mill's chapters on International Trade "will probably be found the truest and most enduring parts of the whole treatise" ; and when two writers of utter obscurity, a Frenchman, E. J. Dupuit, and a German, H. H. Gossen, are raised to the first rank of economists. They, with Cournot, Walras, and Mr. Jevons, are, I

§ 42. The second division of modern Economists may perhaps be called the *American School*, and may be described as optimist and national. It began with a revolt led by Carey in America and by List in Germany against the cosmopolitanism and the aversion to increase of population which were characteristic of the economists of that period. Right in laying stress on national as opposed to individual interests, this school by its illogical criticisms and absurd views of history and progress may be called the least scientific of the five; nor do I know that it can claim any sympathy on the ground of its moral teaching or practical usefulness.

The third division comprises the hated and unacknowledged but still the genuine offspring of Liberalism, the *Socialists*, whom in distinction to the earlier dreamers (§ 40) we should call Neo-Socialists. The Socialistic writings of Proudhon appeared from 1843 to 1852, his German contemporary was Marlo, his successors, Lassalle and, above all, Karl Marx, the present intellectual head of the Neo-Socialists. An examination of their doctrines is not now in place, but rather to mark that the leading writers among them cannot be dismissed as ignorant, uncultured or unscientific, that if they distort history they do but imitate other economical schools, that if they are sophistical they at least do not come up to the sophistry of their liberal opponents, and that if their doctrines are immoral and impious, it ill becomes their infidel opponents to complain.

§ 43. As the fourth division, and under the name of the *Historical School*, I place a number of writers with many divergent opinions, but united in the common error of exaggerating the diversities of human nature, and denying or unduly restricting the natural law applicable always and

suppose, the five lights of the economical firmament. Mr. Jevons is quite pathetic on the neglect of the unfortunate Gossen, and with great simplicity says, after noticing how there have been always a certain number of economists who have applied mathematical methods and symbols:—"The unfortunate and discouraging aspect of the matter is the complete oblivion into which this part of the literature of Economics has always fallen, oblivion so complete, that each mathematico-economic writer has been obliged to begin almost *de novo*," p. xlvii. I venture to hope, and even to think, that the "obnoxious subject" of "mathematico-economic science" (p. xlv.) will meet no better fate in the future.

everywhere. The famous German Historical School of Economics was founded in part by Hildebrand and Knies, but mainly by its present head, the learned and gifted Roscher, whose great knowledge of history, and especially of literature, and whose rare and admirable capacity of saying only what is to the point, makes it all the more lamentable that his lack of a solid foundation in philosophy and theology prevents his building a scientific edifice; so that his economical teaching is a mixture of wisdom and folly, of masterly expositions and bewildering contradictions; and in this he offers a striking analogy to John Stuart Mill, to whom on other points he is so much opposed. On the characteristic errors of the German and other historical schools enough has already been said (*sup.* §§ 8a, 26–29). Here let us well distinguish this general division of economists from certain subdivisions among them, namely, the *Positivists* or followers of Auguste Comte, whose *Cours de Philosophie Positive* appeared 1839–1842, and who can claim as well as the Germans the merit of attacking the unhistorical follies at that time dominant among economists; the English Evolutionists or disciples of Mr. Herbert Spencer (on whom see §§ 25, 27, notes 25, 28, 30, 31); and these can be put with the Positivists under the common title of *Sociologists*; lastly, the German school of economists who became conspicuous in the great reaction against that economical liberalism which had culminated in the North German Industrial Code in 1869, and in analogous laws in Austria: a school called by some of its members Social Politicians, and with great felicity nicknamed *Professorial Socialists* (*Kathedersocialisten*); for it shares the fundamental errors of the avowed Socialists in perniciously exaggerating the attributes, functions, and capacity of the State, and in perniciously undervaluing the importance and independence of the family; and although it has carried on a meritorious war against Liberalism, and given many excellent criticisms and proposals, it can here only claim to have followed the Ethical school; while some of its proposals are anything but excellent, and its faith in them as the salvation of society anything but rational. This school may be said to have been pre-eminent in Germany since the Conference of Economists in Eisenach

in 1873, to have as its most prominent teachers perhaps Schäffle and Adolph Wagner for Germany, De Laveleye for France, and Luzzati for Italy. In England Mr. Cliffe Leslie and Sir H. Maine, though belonging to the Historical School as a whole, can hardly, I think, be said to belong to this particular branch.

§ 44. The fifth division of economists may be called the *Ethical School*, and, like the first and the fourth, comprises a great variety of opinions, but united by one common characteristic, being in this case the defence of the eternal moral law and its application in economical relations, in opposition to the callous dollar-hunting of the Industrialists, to the evolutionary morality of the Socialists and the Historical School, and to the idle dreams that social welfare is to come from the beneficent omnipotence of the State-god or the beneficent absence of State-control.* But with this common ground of truth many writers among the Ethical economists have fallen into errors. These indeed cannot be said to be characteristic of the school, no more than the errors, for example, of the so-called Currency School can be said to be characteristic of the Industrialists. But as I wish to be numbered among the ethical economists, and as I believe that they alone are not in radical error, I must mention certain accidental failings among them, lest these be thought to be essential. In opposing the Industrialists some of the Ethical School have erred by defect, building with the unsound materials of 'orthodox Political Economy,' and trying to make them safe by a coating of Christian plaster; so to a certain degree the meritorious economist Charles Périn: while others have erred by excess, confusing the guiltless instruments of modern life with the wrong use to which they are put, and so deserving the title of fantastic economists; among whom, I suppose, I may place Mr. Ruskin in England, and perhaps Kosegarten in Germany. Further, not a few have been involved in false views as to the past in general, or as to certain particular periods. This historical deficiency

* I am well aware that the Professorial Socialists claim the title of ethical economists; but let them look to the foundation of their Ethics, and cease to claim to be called ethical, unless they will allow themselves to be also called theological.

was to be seen in Sismondi, and I believe was a characteristic of that amiable band of writers and workers in England who were known to our fathers as Christian Socialists, and to whom to a great extent were due the regulations of industry known as factory-legislation and the removal of the worst abuses of the former lawlessness. And history is a weak point of the illustrious Le Play. The fourth and last failing which I need notice is when certain economical premises are maintained which also are among the favourite doctrines of the Socialists, as by Rodbertus, if I mistake not, and also by Bishop Ketteler, who believed in what the Germans call the iron law of wages.

§ 45. None of the foregoing failings are essential to the Ethical School; and, freed from their hindrance, it is now building with the materials afforded by true history and true observation the temple of economical science on the ancient foundations of reason and religion. It only remains for me to give a few names and dates. In 1837 was published the first volume, in 1838 the second, of Sismondi's *Études sur l'économie politique*, his final, complete and noble uprising against economical Liberalism, which he had tried and found wanting. The English Christian Socialists can, I think, be looked on as his disciples, and the anonymous translator of parts of his economical works (*Political Economy by Sismondi, transl. from the French*. London, 1847) deserves by his preliminary essay a high place among our economists. And J. M. Ludlow ought to be mentioned for his excellent pamphlet entitled *Christian Socialism*, published in the year 1851. Sismondi had disciples in France as well as England, and Buret deserves immortality for his new rendering of the liberal motto as *laissez faire la misère, laissez passer la mort*. Among the Germans of the time, perhaps the names of Hanssen and Haxthausen, Rodbertus, Wagener, and V. A. Huber deserve especial notice. In 1855 appeared the great work of Le Play, called *Les Ouvriers européens*, giving a series of masterly monographs on families among the working classes from Spain to beyond the Ural Mountains, from Sweden to Turkey, laboriously acquired by personal observation, and forming a solid basis of fact on which to build true social science. It is true that much of Le Play's reasoning

in this and his subsequent works is weak, shewing that reverence for religion, sound common sense, and a store of knowledge of actual social life, are not sufficient without philosophy, theology, and historical knowledge to form a system of social science; and that his works are only a contribution to Economics. But still they are a most valuable contribution, a splendid monument of well-directed industry; and the Ethical economists who have followed him in France seem happily inclined to avoid rather than to develop his weak points. Among them perhaps can be placed Périn, whose work entitled *De la richesse dans les sociétés chrétiennes* (first published in 1861), though with great want of logical accuracy and though containing much of the débris of economical liberalism, has also many admirable discussions, notably on population, on distress, and on charity, and shews an immense advance on Le Play as regards economical history. The dreadful experiences of the year 1870-1871 has given a fresh impulse in France to the Ethical School, witness the new editions of the works of Le Play, the monthly economical publication called *L'Association Catholique*, and the writings among others of de la Ribbe and Claudio Jannet, who if the appellation 'historical' be used as a term of praise, deserve it better than Roscher, Laveleye, or Mr. Leslie. In Germany a similar development of true economical science has occurred, and though no single work that I know of equals the importance of the French writers aforementioned, yet the volumes of the economical journal the *Christlich-soziale Blätter* (published fortnightly since 1868) form a valuable storehouse of reasoning and information.

§ 46. And now, having come to the end of these fragments on economical literature, I once more admit their imperfection, and make haste to profess the likelihood that I have fallen into error, and my readiness to stand corrected. And if asked why I have ventured with so little knowledge on a field that needs so much, I answer that I have been compelled in self-defence to say something, since the popular views on the history of Economics are at variance with what I hold to be true, and can only be met by giving some sort of substitute; nor can my entire work claim to be more than a makeshift.

As a conclusion to this introduction let us notice, since we are now in a position to judge, the charges against 'Political Economy' of being tiresome, dismal, or immoral. If these charges have been partly due to interest or ignorance, they have also been to a great extent the protest of reason and conscience against pseudo-science. Intolerably tiresome are not a few of the discussions among the Industrial School where the weary reader is dragged through an unreal world and tortured with impossible hypotheses. But not all economists are tiresome. Dismal indeed are some of the views of John Stuart Mill and Cairnes, but not of all economists; though true economical science must indeed in parts be dismal, as it has to probe the wounds of fallen human nature, and to correct the idle hopes of progressive virtue and happiness; and in this sense the term dismal must be applied equally to Politics. Profoundly immoral are the fundamental doctrines of many economists on wages and population; and Mill has the credit of not attempting, though he supports them, to veil their repulsiveness. Immoral also are various other special doctrines, and also the fundamental principle of the Historical School. And in short, as Economics are a part of Ethics, how can those whose ethical doctrines are false, be expected in their economical teaching not to offend against Morality? Nor from the mischief of their practical application is it unreasonable to judge that the economical and ethical systems on which they rest are untrue; it would only be unreasonable if we judged that true Economics and Ethics were nowhere to be found. And amid the struggle of numberless social theories let us remember for our guidance how it is written: *ex fructibus cognoscetis eos*.

BOOK. I.—ECONOMICAL ELEMENTS.

CHAPTER I.

PRIMARY NOTIONS.

A Good, a Want (Requirement), Utility, Value, § 47, 48—Wealth, a Commodity, Property, § 49, 50—Preparation, Enjoyment, Production, Consumption, Destruction, § 51, 52—Labour (and its Kinds), Cost, Remuneration, § 53–55—Revenue (Gross and Net), Expenditure (Nominal and Real), § 56, 57—Capital (Fixed and Circulating), Exchange, Price, § 58–60.

§ 47. To define and make intelligible a few primary notions of Economics, in order hereafter to avoid confusion, is the aim of this chapter, which therefore must have somewhat the character of a vocabulary. And I will be guided by the three rules, first, to give only those terms and distinctions which are requisite for subsequent discussion; secondly, to use as simple terms as possible, and in a sense as near as I can to the common signification; lastly, to be very sparing in verbal controversy; for otherwise, as almost all the leading terms in Economics are unsettled, this chapter would rapidly swell to a volume. In some cases I will give what seem the suitable equivalents in some other languages; for the translations will often make the English words better understood in the particular sense in which they are used in Economics; and a primary notion ought not to be expressed by what is untranslatable. But if the English terms which I use are open to correction, still more are the foreign equivalents.

We start with the notion of a *good*, in the sense of whatever is suitable to our nature. (*Bonum psychologicum = id quod naturae nostrae convenit ac proinde appetibile est.*) And by

suitable is meant not merely what is desirable for the whole, but also for a part of our being, even a lower part. Thus vengeance is a good, not indeed for our whole being, but for our sensible appetite (*appetitus sensitivus*) as a means of satisfying its angry craving (*passio irascibilis*); and though our will is only to be moved by some good, that good need not be a noble object (*bonum honestum*) but some pleasure of the senses (*bonum delectabile*). The particular goods with which Economics are concerned, and which may be called economical goods, are those which relate to industrial, social, and domestic life, as food and clothing, the fruitful field, the fresh sea breezes, the harp and the sweet sounds therefrom, the skill of the musician, the delight of his hearers, parental authority, maternal love. And from these examples, as well as from the definition, it is plain that a good can be incorporeal, immaterial, or intangible, and is not limited to what is corporeal, material, or tangible.

§ 48. By the term *a want* or requirement (*necessitas*, *χρεία*, *un besoin*, *ein Bedürfniss*) let us express the negative idea of the absence of some good, whether desired or desirable, and thus class together the want of the hungry for food, of the unconscious infant for care, of the eager student for instruction, of the unwilling schoolboy for learning, of the opium-eater for his drug, of the sick for medicine, of infidels for the true faith; nor do I see any advantage in limiting the term to conscious desires, still less to what from a moral point of view is desirable.

The word *utility* (*utilitas*, *ωφέλεια*, *utilité*, *Brauchbarkeit*) can be taken in several senses, of which the most suitable, I think, is that which makes it mean simply the capacity of any good to serve any human purpose. The term *value* or worth (*valor*, *αξία*, *valcur*, *Werth*), obscured by endless controversies, can be taken to express, not a quality or capacity of any external object, but simply the importance attached by a given person to any good. If this sense be adopted—and it seems a way to escape needless discussion and ambiguity—we ought not to speak simply of the value of an object, but always name the person (the subject) to whom the object is valuable. For value only exists in the mind of

the person ; it is his attitude towards an object of desire, a mental habit the result of a mental act called valuation. Nor can it be measured and expressed in figures ; for not even the person himself, much less other persons, can tell the importance which he attaches to any good ; all that can be told is, that he attaches more importance to one good than to another. And looking back to utility we can now say that no one values any object unless it possesses utility, and that utility like value cannot be precisely measured and set down in figures. Thus bread serves to sustain life, but the life may be that of an indolent voluptuary or industrious father of a family, that of a highwayman or statesman, that of an heresiarch or apostle : it may prolong a life of sickness and pain, or one of health and enjoyment.

On the phrases value in use, and value in exchange, I will say what is necessary at the end of this chapter. (*Inf.* § 60.)

§ 49. If we are to avoid confusion in Economics, we must be careful to make a double distinction : the first between material or tangible and immaterial or intangible being ; the second between personal and impersonal being, or, in common language, between persons and things, between the living human being and the external things which can be applied to his use. And we need a word to express goods which are neither immaterial nor persons. For such goods let us use the term *wealth* (*divitiæ*, *πλοῦτος*, *richesse*, *Reichthum*) ; and as wealth implies an aggregate of goods, let us use for a single good of this class the term *a commodity* (*res corporalis*, *(σωματικόν) κτῆμα*, *une commodité*, *ein Sachgut*), which can be defined as a good which is corporeal and not a person, and which can be described as a material, tangible, or sensible object external to man, and capable of serving some human purpose.*

* The plural 'commodities' is thus nearly synonymous with wealth, but not quite, as not implying a sum or aggregate. Wealth is also often used to imply possession, and often to imply further that the commodities possessed are abundant ; and this is always the sense of the adjectives wealthy or rich. Not a bad discussion on the term wealth is to be found in the work by Bailey, published anonymously in 1825, *A Critical Dissertation on Value*, p. 164 *seq.* In the title of Adam Smith's book, 'An Inquiry into the Nature and Causes of the Wealth of Nations,' we could not for

If this view is accepted there seems little difficulty in deciding what ought or ought not to be called wealth. Personal beauty or skill, the custom (*clientèle*, *Kundschaft*) of a business, rights, titles, claims, services, workmen, slaves, are all goods, and may enable us to obtain wealth, but are not themselves wealth. On the other hand, not merely fields and factories, food and clothing, houses and furniture are wealth, as is obvious, but also the air and the water, the trade-winds and the sunlight, though in the main incapable of appropriation, that is of being used by one or more persons to the exclusion of others.

By the word *property* (*facultates* or *patrimonium*, *ουσία*, *fortune* or *l'avoir*, *Vermögen*) I mean appropriated wealth, that is the sum of commodities over which a person (physical or juridical) claims certain rights of use to the exclusion of others. Naturally we must not confuse these rights, which can be called *ownership* (*dominium*, *κτῆσις* or *ιδιοκτησία*, *propriété*, *Eigenthum*), with their object, which is called property: we must, for example, well distinguish the house which is the object of rights from the rights of which the object is the house. And although it *may* be more convenient in jurisprudence to use the word property to include all goods, including persons and incorporeal things over which rights are exercised, it is quite otherwise in Economics. For example, a man's slaves or the goodwill of his business *may* be conveniently reckoned in law as part of his property no less than his fields, his cattle, or his shop; but so to reckon them in Economics would bring us, as we shall see, into almost certain confusion.

§ 50. The use of the term wealth adopted in the preceding section can be made clearer by noticing some other uses of the term. Some writers make it essential to wealth to be exchangeable. But if this means that it must be legally exchangeable, we should have to say, for example, that land when entailed was not wealth, and admit that at the breath of the legislature the wealth of a country might instantly be doubled or might shrink into insignificance. If it means that wealth is only what is potentially exchange-

'Wealth' substitute 'Commodities' simply, but should have to say 'Amount of Commodities at the Disposal of,' or some similar paraphrase.

able, that is, of such a character as not to exclude the possibility of exchange, the definition is less intolerable, but still is misleading, laying too much stress on exchange (itself not a simple term) which is neither necessary nor universal, thus making essential what is only accidental.

Another view makes wealth include immaterial things, though there is disagreement whether, for example, labour and skill should be included, and if so, whether all kinds. The most reasonable view (of Mr. Thornton in *The Fortnightly Review*, April, 1875) excludes them, but includes all legal rights and privileges as far as exchangeable, such as credit, custom, copyright, and patents. Omitting other inconveniences, this view makes us likely to fall into the *error dupli*, that is, counting the same things twice over. Thus if the claim of the fundholder or the mortgagee is called wealth no less than the land of the indebted nation or individual (the mortgagor), it is plain that wealth can be increased indefinitely by public or private borrowing, and amid the multiplication of rights we are likely to forget that the number of fields, and of cattle, and of bushels of corn remain precisely the same, and that whatever the creditor gets beyond paper and promises, is so much taken from the debtor.

The use of the word wealth to include persons seems of all the most misleading, as means and end, object and subject, things and persons are thereby confused. Nor say that we cannot help calling the slaves of the American planters a part of their wealth. For we need not be bound by the fetters of delusive language even though it be legal or popular. No doubt in common discourse and at law the slaves were the property of their masters in America as well as in classic Rome, and an iniquitous jurisprudence may have refused them the title of persons. Nevertheless they *were* persons; their loss has to be considered in Economics no less than the master's gain; and they should no more be called wealth or property in the economical use of the term, than the independent workpeople in a factory. These are as necessary to the wealth of the manufacturer as the slaves to the wealth of the planter; if the plantation would fetch no price, or next to none, were no slaves to be bought, the

factory would fetch no price, or next to none, were no work-people to be hired ; and the wages paid to the workpeople may be as necessary for their existence as the rations served out to the slaves. Nor because in the one case the master has formally greater rights over those who serve him than in the other case, ought we to say that the servants are in the one case his property, in the other not. For the difference is of degree not of kind ; and even the sale of slaves has its analogy among 'free' workmen ; for when an English farm or factory is sold, the seller in fact, if not in law, imposes a new master on the farm labourers and factory hands, and though they are not actually bought, the price of the property will, *ceteris paribus*, be higher in proportion as their labour is known to be good and cheap. But as we do not confuse them with the property for which they are indispensable, so neither let us confuse the slaves.

§ 51. From the nature of wealth, let us turn to its use. By *use* (*usus*, *χρῆσις*, *usage*, *Gebrauch*) we mean the act of applying any good to our purposes. Thus the use of wealth by man is his application of it to any of his purposes. This application is done in many ways, and many distinctions might be made accordingly, of which, however, only one, I think, is necessary at present. We either use a commodity as preparatory, that is, in order that some change may be effected in it, or in something else, so as to render it or something else immediately applicable to our wants ; or else we use it as enjoyable, that is, for immediate personal application. The first of these two processes can be called *preparation* (*præparatio*, *παρασκευή*, *préparation*, (*Vor*)*bereitung*) and the wealth so used can be called preparatory wealth ; the second can be called *enjoyment* (*fruitio*, *ἀπόλαυσις*, *jouissance*, *Genuss*), and wealth so used can be called enjoyable wealth. Thus, for example, it is preparation not enjoyment when a man digs a field, sows the seed, reaps the crop, grinds the corn, changes the meal into bread : all these processes are preparatory and for the sake of the bread ; but the process of eating the bread is enjoyment, not preparation for any other commodity ; it is the final and personal application of wealth. Similarly, building or repairing a house is preparation ; dwelling in it is enjoyment ; making or

mending a garment is preparation ; wearing it is enjoyment.* And thus, whereas the cotton dress of an English maidservant is enjoyable wealth, being used immediately to supply her personal wants, the plantation in Virginia, the steamer across the Atlantic, the factory in Lancashire, the raw cotton, the cotton cloth, the dye, moreover the oats eaten by the horses on the plantation, the coal burnt in the steamer, the oil used for the machinery in the factory, and also the planter's ledger, the maritime chart on board the steamer, and the factory clock, are all preparatory wealth, being used not for immediate personal wants, but in preparing the cotton dress ; and this alone is used for enjoyment, not those other commodities. But let no one call preparatory wealth the food and clothing of the negroes on the plantation and the crew of the steamer, or of the workpeople at the factory ; for human food and clothing are not for preparation but for enjoyment.

To seek the exact limits between preparation and enjoyment, and say precisely where the one process ends and the other begins, seems to me difficult and unprofitable : and, therefore, leaving this question, I would rather notice how important is the distinction between preparatory and enjoyable wealth. At a given time a nation is prosperous or distressed according to the abundance or scarcity, not of its preparatory, but of its enjoyable wealth. The rains may have fallen, the crops have been planted, a few weeks may bring an abundant harvest, and yet the people perish with famine for the lack of commodities which can be enjoyed in the present. If, conversely, there is abundance of food for the present, and yet from the deficiency of preparatory wealth, the land being parched, the draught cattle dead, there is a prospect of distress to come ; this distress will not come as long as there is only lack of what is preparatory : it will first come when the enjoyable wealth begins to fail.

§ 52. The word *production* (*productio*, παραγωγή, *produc-*

* If I knew a better term than enjoyment, I would use it, as this in common language generally implies pleasure, but not so in the sense given in the text, in which is implied a final and personal, but not necessarily a pleasurable application, and thus includes taking unpleasant medicine no less than pleasant food.

tion, *Hervorbringung*) in ordinary language is equivalent to the preparatory use of wealth, and is needed because preparation is a wide term that applies to the use of any kind of goods. But production can and ought to be strictly limited to wealth, and such phrases as the production of human beings, of education, of pleasure, of discontent, of public security, should have no place in Economics. As to the disputes on so-called productive and unproductive labour, they shall be noticed, as far as need be, presently.

The word *consumption* (*consumptio*, *κατανάλωσις*, *consommation*, *Verbrauch*) is more ambiguous than production in its common meaning, though I think it always implies a loss of utility in the object consumed, and therefore, though it would be convenient if it could be used for the enjoyment of wealth as production for the preparation of wealth, such a meaning would be too great a violence to language; for we should have to say, for example, that a house was consumed by its inhabitants and the sculpture in the Vatican consumed by the visitors. Let us then first confine the term to a use of wealth, and not speak of the consumption of labour, of time, or of happiness; and then define it as the process by which the utility of any commodity is lost in serving its natural purpose (*finis operis*). Thus when men eat bread or wear out clothes, the bread and clothes are consumed; for the natural purpose of bread and clothes has been served in the process. When cattle eat grass or when coal is burnt in a furnace, the grass and the coal are consumed; for in each case the *finis operis* is attained, being here not enjoyment but preparation. Whence too the distinction is plain between consumption and enjoyment. Each may or may not accompany the other. Thus when a horse devours oats, or when coal is burnt in a furnace, or when machinery is worn out, there is consumption but not enjoyment; and the consumption here can be called industrial. When a man eats bread there is both consumption and enjoyment, and the consumption here can be called personal. When a man dwells in a house there is enjoyment but no consumption. It is true the house will not last for ever; but it does not decay because it is dwelt in: it would decay much faster if it were empty.

This view of consumption allows us to make a profitable

distinction applicable alike to preparatory and enjoyable commodities. If they are consumed rapidly we can call them *transient*, but if consumed slowly or not at all, we can call them *durable*. So when preparatory commodities, in other words, means of production, are of the sort that their efficacy (to use Mill's phrase) is exhausted by a single use, as *oats* consumed by horses, fuel consumed in a furnace, tallow which *used* as an ingredient of soap loses its utility as tallow ; *wheat*, which ground into meal can never more be used as seed corn ; *in short*, whenever they can be called materials in the widest sense, including what forms no part of the substance of the finished product (*Hilfsstoffe*), they are *transient means of production* ; whereas when they are of the sort that their efficacy for a given purpose is not exhausted in a single use, as land, canals, railways, ships, factories, shops, machinery, tools, draught cattle, milch cows, when they give repeated help of the same sort, whenever they can be called instruments in the ordinary sense, they are *durable* means of production. Similarly we can distinguish the *transient* enjoyable commodities, as man's food and drink, household fuel, narcotics, perfumery, from those which, like clothes, furniture, houses, pictures, pleasure grounds, or jewels, are more or less *durable*. No doubt the degrees of duration are very variable (compare kid gloves and jewellery), and the line between durable and transient is not always very clear ; but the distinction between them is very useful, and clear enough for the purpose. And those who ask, to what class belong commodities like cut flowers or paper collars, must answer the question for themselves.

The terms *destruction* and *damage* (*destructio* and *damnum*, ἀναίρεσις and βλάβη, *destruction* and *avarie*, *Zerstörung* and *Schade*) when applied to wealth mean total, respectively partial loss of its former utility in some other way than by serving its natural purpose, as when a city is burnt, a pitcher broken, a ship wrecked, a garment torn, a crop devoured by locusts. In this sense destruction and damage are one species of loss of utility, while total and partial consumption are another ; and thus a commodity cannot be both consumed and destroyed ; if it is the one it cannot be the other. Nor is this distinction, which is of great use for economical science,

in any great opposition to the usual sense of the words. We do not speak of destroying our food when we eat it ; we do not call a threadbare coat damaged ; and though we do say that a house has been consumed in the flames, we say at least as often and as correctly, that it has been destroyed by fire.

From our definition it is plain that destruction and damage are not confined to natural disasters, such as the results of a flood or a storm, but can also be man's handiwork, and this not merely by accident, as when a servant breaks a dish or an apprentice spoils good materials, but on purpose, as when windows are broken by a mob. Of course some good is always aimed at by the destroyer, but as the good is not the proper end or natural purpose of the object destroyed, we do not call the process consumption, but destruction, whether done to gratify boyish love of mischief, or popular vengeance, or private spite, or national hatred (*delenda est Carthago*), or military, sanitary, or moral requirements. And thus wilful destruction is by no means of necessity foolish, or wicked, or disastrous ; it may be very beneficial, as the burning of Moscow, the demolition of unhealthy dwellings, the slaughter of infected cattle, the destruction of immoral or impious books. But however beneficial it is still destruction.*

Notice, finally, that an object can suffer loss of utility (and therefore either consumption, destruction, or damage) without undergoing any physical change, as an almanack when the year has run out, a road over a mountain when a tunnel is made below, or the idols and talismans of pagans when they abjure their paganism.

§ 53. The term *labour* or work (*labor*, *ἐργασία*, *travail*, *Arbeit*) is not easy to define. But this is no excuse for those who leave it altogether undefined, nor for Mill, who leaves it obscure. He says (*Polit. Econ.* Bk. I. c. I. § 1) that it is either bodily or mental, muscular or nervous, and that "it is necessary to include in the idea not solely the exertion itself, but all feelings of a disagreeable kind, all bodily inconvenience or mental annoyance connected with the employment of one's thought, or muscles, or both, in a particular

* To make consumption include all destruction, as Roscher (*Nationalök.* § 206 *seq.*) does, seems to me an unfortunate use of terms.

occupation." This leaves us in the dark as to whether that ploughman labours whose ploughing is a pleasure to him, and whether playing is labouring, not to speak of this description of labour being applicable to the action of those who weep round a tomb, a strange use of the term. Adam Smith is vague;* MacCulloch (Note 1 to his edit. of *The Wealth of Nations*) defines labour "any sort of action or operation, whether performed by man, the lower animals, machinery or natural agents, that tends to bring about any desirable result." But this is to distort ordinary language and to turn men into machines without any gain that I can see for the purposes of Economics. To say labour in 'Political Economy' is only that exertion that demands something for itself in exchange (Perry), in its obvious sense excludes the exertions of slaves for their master and of self-sufficing peasants for themselves and their families. To define it the exercise of any human faculty for a definite object (Hearn), would turn all play into work. To limit it to human activity directed towards the acquisition or preservation of property (Rösler) is nearer the mark, but too narrow; for all unpaid exertions, literary, artistic, political, religious, would be evidently excluded, and too obscure; for a judge who performed his office for the sake of his pay would or would not be labouring according as we understood the word 'directed' to apply to the end of the operator (*finis operantis*) or to the end of the operation (*finis operis*).

It is best, I think, to look only to the end of the operation, and to define labour as human action of which the proper end or natural purpose (which indeed may be in some cases determined by the end of the operator, but only in some cases) is some good external to itself. Thus, whenever the action in itself gives a reward to the agent, it is not labour; so none of the natural functions of the body, as eating; so no recreation though it entail the greatest exertion, as hunting, or though to the given individual it may be most unpleasant, as a tiresome banquet. Conversely, whenever the reward is not in the action itself, this is labour, as the tilling of land whether by the peasant with joy or by the hireling with sorrow; and

* He calls labouring cattle 'productive labourers,' and speaks of the labour of nature (Bk. ii. ch. v.).

the action of the night porter, though it be mainly to sit motionless ; and of the boatman, though the same physical act of rowing when done by the holiday-maker at his side is not labour ; for the end of rowing when done by a holiday-maker is different when done by a hired boatman.*

I think this notion of labour is sufficiently accurate for the purpose, though greater accuracy would be welcome and the definition needs an indulgent interpretation. In particular those exertions which are not labour must be taken to include all immediate preparation on the part of the agent lest we absurdly call labour taking our place at a banquet. Thus to pass a winter in the South, an action having its reward in itself, and therefore not labour, must be looked on as a whole, and the incidental exertions of the journey must not be looked on as labour any more than the exertion of pouring out a glass of wine and raising it to one's lips. And perhaps the rule may be followed never to call an action labour which cannot be so called in ordinary conversation ; but not conversely.

§ 54. If it is difficult to give an accurate definition of labour, it is also difficult to give a satisfactory classification of its varieties, witness the immense controversy on so-called productive and unproductive labour, which may perhaps be summed up by saying that while both sides use these terms, one side use 'productive' to mean resulting in, or at least conducive to wealth, the other to mean resulting in any good, or at least any rational good.†

On this controversy let us first notice that both sides can be charged with misusing language. It is intolerable to call, as Adam Smith does, the labour of the judge and the general, of the physician and the priest, unproductive, or, like Mill, only partially productive, while the labour of the weaver or blacksmith is wholly productive. But then the

* The difference between the same operation, according as the person doing it is at work or at play—a professional or amateur—is marked by Aristotle, *Polit.* v. (viii), c. 2, § 2.

† This tiresome question is discussed by Adam Smith, *Wealth of Nations*, Bk. ii. ch. iii., and by MacCulloch in the notes 'correcting' Adam Smith *ad loc.* ; also by Mill, *Unsettled Questions of Polit. Econ.* Essay iii., and *Principles of Polit. Econ.* Bk. i. ch. iii., and by Roscher, *Nationalökonomie*, § 48–55.

other side are to blame for using the word productive when they might have used words like useful or beneficial, and misled no one.* Secondly, Adam Smith is mistaken in not understanding the intimate union of the various parts of the social body, and in imagining a nation could be considered as made up of two separate parts, the one, the productive labourers, maintaining the other, namely, the unproductive labourers and those who do not labour at all ; as though the weaver could go on weaving amid civil discord or foreign invasion, with unset limbs, unhealed diseases, or would go on without a motive ; and as though we could say that those who enabled or induced his labour had no share in the process. Seeing some of these difficulties Mill widens the notion of 'productive' labour so as to include "labour which yields no material product as its direct result, provided that an increase of material products is its ultimate consequence." (*Principles of Pol. Ec.* I. iii. 3.) But this eliminates unproductive labour altogether ; for who can say that actors and musicians and the very footmen kept for mere display are unproductive labourers, when we see merchants and manufacturers hard at work by day and thus increasing material products, in order to afford the pleasure or pomp of being served by these 'labourers' in the evening. On the other hand the opponents of Adam Smith seem not rightly to distinguish between what is corporeal and incorporeal ; for after all we cannot feed on public security, nor are good laws a substitute for clothing and shelter. And there is a truth expressed in the saying of Adam Smith : " a man grows rich by employing a multitude of manufacturers ; he grows poor by maintaining a multitude of menial servants."

The best solution of the problem how to classify labour seems to me to begin by discarding the terms productive and unproductive as misleading and unnecessary, and then not to divide labour according to its results, for these are too vague and disputable, but rather according to the proper

* The famous retort of List :—"To rear swine then is productive labour, to rear men, unproductive !" seems as misleading as the view against which it is directed. For men and swine are not in the same order of being ; nor are the first reared for the same purpose as the second.

object, purpose, or end of the particular operation (*finis operis*). According to this principle of division four kinds of labour can be distinguished, *industrial*, *public*, *ministerial*, and *predatory*, having as their end, the first production, the second some function of government, the third some personal service (ministration), the fourth the unlawful acquisition of others' property. Under industrial labour would come that bestowed on agriculture, manufactures and commerce; under public labour that of the civil and military service in the widest sense from the highest to the lowest; under ministerial labour that of the clergy and teachers, of literary and scientific men, of the legal and medical profession, of musicians, actors, and the like; under predatory labour, that of thieves, smugglers, pirates, false coiners, common usurers, and the like.

This division does not claim to be perfect, but only to be of sufficient exactness for the purpose and not likely to mislead. Naturally a given person may be in more than one class, as when a farmer is a magistrate; and his labour will be sometimes industrial, sometimes public. Those employed on State domains belong to the industrial rather than the public class. The military retainers of the 'feudal barons' of Norman times would be readily put by those acquainted with history among the public class, forming part of the military organization of the time. More difficult is the question where to place domestic servants, who have been a thorn in the side of economists. Let us distinguish between a servant in a humble house who is as busy in the preparation or reparation of material things as the spinner or machine-maker in a factory, and thus should be placed in the industrial class: and the lackeys, valets and lady's maids in a great household, who have as their one or their chief function to give personal attention to their master or mistress, and thus should be placed in the ministerial class. Such a distinction of different kinds of servants is still more obvious in the *familia* or slave-household of a great family in Antiquity; for it contained not only those servants answering to the modern cook or housemaid, but also spinners and weavers, smiths and carpenters; and all these can be put in the industrial class as distinct from the personal attendants for dining and dressing, for the promenade and the bath. Without

aiming at exactitude which perhaps is unattainable, let us say roughly that all those domestic servants are to be put in the ministerial class, whose work is *mainly* personal ministration, as well as those who in common language are *more* for shew than use; not therefore a cook, or housemaid, or gardener (unless they are such rather in name than reality, being superfluous supernumeraries); for the cook must be classed with the baker or butcher; the housemaid with the house-painter; the gardener with the farm labourer; whereas the labour of a nurse, or valet, or lady's-maid, is mainly in the shape of personal attendance and ministration, and thus like that of the barber or musician, of the doctor or the priest, is not to be called industrial but ministerial.*

Let this much suffice on the kinds of labour, though some other division may be possible which would have greater precision and convenience.

§ 55. Distinct from the notion of labour is that of *cost* (*jactura* or *onus*, *ζημία* or *βάρος*, *frais*, *Kosten*), which means personal sacrifice or the surrender of some good by some person. Cost therefore is a wide term, including not only that sacrifice of our time and personality implied by labour, but also the loss of pleasure, or health, or esteem, or friends, or in short the loss of any goods, and among them of wealth. But, like utility and value, cost cannot be precisely measured. We can indeed count the hours of labour but not the personal sacrifice, which for example is very different for the willing and for the unwilling servant, though both be equally healthy, skilful, and strong, and do the same kind of work for the same time. Again, we may be able to express in figures

* If asked to what class belong coachmen and grooms, I would say, in the main, they belong to the industrial; but if the main function of a given coachman is to drive my lady, or of a given groom to ride out with her, they belong to the ministerial class. In the same way we can judge of a maid, according as her main work is to make and mend the dresses of her mistress, or to dress her. The difficulty of separating personal services from production, is treated with some acuteness by Senior, *Political Economy*, edit. of 1850, being vol. vi. of the *Encyclopædia Metropolitana*, pp. 51-53. The difficulty of making any satisfactory classification of the population of a country is seen not only from the variety of classifications made by economists, but also from the confusion in the census returns of various countries regarding the employments of the population.

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the wealth which is sacrificed to obtain some other good, but we are unable to express in figures the personal sacrifice, which, for example, if in the shape of the same monthly subscription to a benefit society, is very different for two artisans, one of whom is compelled thereby (having a larger family or smaller income) to forego his accustomed use of tobacco, and the other not.

Remuneration or reward (*remuneratio*, ἀντιδωρεά, *rémunération*, *Vergeltung*) means a good received or expected in consideration of some cost. The cost may precede the remuneration, as for one who pays for his journey beforehand ; or follow it, as for one who does not pay for his food at the inn till he has had it. And naturally, as we cannot measure exactly the utility of the good received or expected, we cannot measure exactly the remuneration itself, and much less its relation to the cost. If indeed it is in the shape of wealth we can measure the wealth, and state the number, size, and weight of the commodities, or their price (*inf.* § 60) in some other commodity, but not the remuneration. The five pounds, for example, which a struggling artist receives for his first picture can be measured but not the remuneration, which may be really much greater to him than the fifty pounds which he receives for a picture in the days of his advancement, or the five hundred in the days of his renown. The labourers in the parable received every man a penny. We can measure the penny of each, but cannot tell how great a reward it was to each, either in itself, or in proportion to the toil whereby it had been won.

§ 56. The substantive revenue (or income) and the adjectives net and gross, when applied to it, are surrounded by a polemical literature ; and the common acceptance of the terms is not sufficiently clear to be a guide. Still we can I think, by making distinctions, obtain sufficient precision without any violence to language. *Revenue* or income* (*acceptum* or *proventus*, πρόσσδος, *revenu*, *Einkommen*) in the *wide sense* can mean the sum of commodities entering into the property of a given person during a given time. And

* I use these two words indifferently, though by a freak of language the one is more usually applied to governments, the other to private individuals.

these commodities can be called *receipts* (*accepta*, αἱ λήψεις, *recettes*, *Einnahmen*). The source or character of the receipts does not matter. They may be the produce of a flock, a field, or a factory; they may be wages received for labour, or a gift, or the proceeds of a sale, or rent for the use of a farm or house. In this wide sense revenue is sometimes called *gross*. In the *narrow sense* revenue can mean that portion of this gross revenue which a man can dispose of without diminishing his previous property; in other words, that portion of his receipts in a given time left to him after making good all incidental diminution of his property. In this narrow sense revenue is sometimes called *net*, and can be best explained as gross revenue *minus* a number of items, which are as follows:—

(a) The diminution of wealth by wear and tear of machinery, by the using up of materials, by all, in short, that can be called industrial, as distinct from personal consumption (*sup.* § 52); for the using up of wealth by personal consumption is a mode of spending net revenue, and thus plainly is not to be deducted before this is reckoned up.

(b) Loss by destruction and damage.

(c) Loss of what is taken by thieves and bad debtors.

(a) All property handed over to others for other property in return; but not gifts which are a mode of spending net revenue, and thus plainly are not to be deducted before this is reckoned up.

(e) All those payments for labour which are intended to bring in revenue, as of a farmer to his ploughman, a lawyer to his clerk, an hotel-keeper to his waiters; but not the payments for that labour which consists of personal ministration to the payer or his family, and thus not the wages of a footman or a nurse; for this is a mode of spending net revenue, and thus plainly is not to be deducted before this is reckoned up.

Perhaps the terms *nominal* and *real* revenue might be substituted for gross and net. For while the net revenue remains precisely the same the gross may be swollen by artificial circumstances, notably by the spread of buying and selling. For example, if a man grows the corn which his family consumes, this corn, say forty bushels which could be

sold for ten pounds, figures in his gross revenue simply as produce. But if instead of growing the corn he grows cotton sufficient to buy the forty bushels required, and obtains them in this way, his gross revenue will now comprise the cotton as well as the corn (the cotton, namely, as produce, the corn as proceeds of sale), and be doubled, at least in this particular department, while the net revenue, which is the real matter of importance to him, may remain unaltered.

§ 57. The word *expenditure* (*expensum* or *sumptus*, *δαπάνη*, *dépense*, *Ausgabe*) must be treated like revenue and taken in more senses than one. In the *widest sense* it means the sum of commodities passing out of the property of a given person during a given time; and these commodities can be called *outgoings* (*expensa*, *αἱ δαπάναι*, *dépenses*, *Ausgaben*). In this sense expenditure comprises all that a man with his family consumes personally; all that he gives, or sells, or pays as wages; all that he allows to be used up or worn out in production; all that is stolen or destroyed of his property. This widest sense of expenditure corresponds to gross revenue and might be called *gross expenditure*.

A *second sense* only differs in excluding all involuntary outgoings, namely, by destruction, damage, theft, and bad debts. And this may be taken as another sense of gross expenditure.

A third and *narrow sense* excludes not only involuntary outgoings, but also all those incurred for the sake of net (real) revenue, as the payments of a manufacturer for wages and raw material. And in this narrow sense, applying only to those voluntary outgoings not incurred for the sake of net revenue, expenditure might be called net. The difference of the two kinds of voluntary expenditure can be seen from examples; that on coal for a factory is one kind, being incurred in order to procure a surplus of receipts over outgoings, while that on coal for household use is the other kind, being incurred in order to enjoy a warm house and hot dinner; the payment to farm labourers is one kind, but to a musician, the other; a doctor's outlay on his professional carriage or consulting room is one kind, that on his wife's carriage or reception room, is the other; rent for a shop is one kind, rent for a dwelling-house, the other. In the one

set of cases the outlay is for the sake of net revenue, in the other, for the sake of enjoyment.

Having distinguished the different senses of expenditure, the best use of words seems to me the following. Let us call all involuntary outgoings *involuntary expenditure*; let whatever is spent for the sake of net revenue be called *industrial expenditure*; let whatever is spent for the sake of enjoyment be called *real expenditure* (or net, if this word be preferred); finally, let *nominal expenditure* (or gross, if this word be preferred) be used in the widest sense, including all outgoings, whether involuntary, or industrial, or real.

If asked under what head of expenditure we are to put the payment of taxes and legal charges, I answer, first in regard to taxes, that under ordinary circumstances their payment is real expenditure; they are paid not in order to make receipts surpass outgoings, but in order to secure an immediate personal good of the greatest importance, the order, namely, of justice. That a person may not like paying them matters no more than that he may not like paying his doctor or his tradesmen; and the payment will be enforced in both cases. It is true he is obliged to receive the benefits of the order of justice, in a sense in which he is not obliged to receive the baker's bread or the doctor's ministrations. Still the outlay for these benefits is not to be called involuntary in the sense in which losses by fire or theft are involuntary. Only mark, it can happen that taxes are grossly unjust, as when levied for bad ends, or by illegitimate authorities, or when grossly unequal or excessive; and then indeed, like the payments extorted by brigands, they are involuntary expenditure. In regard to legal charges much the same can be said. They also in the main are paid for the sake of the order of justice, that is, for the ascertainment and enforcement of rights; and they do not lose this character by the fact, where it is so, of their being paid by the particular persons whose rights are obscure or have been violated, instead of by the community as a whole. And thus the annual legal expenses of a railway company are to be considered, like the passenger tax it pays to Government, as real expenditure, not industrial; and form a part of what the shareholders spend on the State; whereas what is paid

to the railway clerks, the guards, and the engine drivers, is industrial expenditure and has to be deducted before we reckon the real revenue of the shareholders. But we have considered legal charges in their use, not in their abuse ; for when grossly extortionate and unfair, they also, like the taxes of a tyranny, are mere plunder, and their payment is not real but involuntary expenditure.

A word of explanation ought, I feel, to be added on the foregoing mode of reckoning real revenue and real expenditure. I am far from wishing any other mode to be held erroneous ; for it is a matter, not of doctrine but of words and convenience. All I ask is that the more we make deductions from nominal revenue before reckoning real revenue, the more we must take from nominal expenditure before reckoning real expenditure ; and conversely. For example, the decay of the plaster and paint that cover the brickwork of London houses is a loss that, according to my use of terms, is to be deducted from the occupant's nominal revenue before reckoning his real revenue. But it *may* be thought more convenient not to make this deduction ; and it does not matter, provided only that the loss be put down as part of his real expenditure. Thus again, and with much practical convenience, the payments to the housemaid and cook *may* be added to real expenditure, like the payments to the nursemaid or the footman, provided only we do not deduct them (as according to my mode of reckoning we should do) before reckoning up the master's real revenue. Conversely, all legal charges *may* be deducted from our nominal revenue (I believe they are in the accounts of commercial houses) before we reckon up our real revenue ; provided only that we do not then go and add them (as I have added them) to our real expenditure.

§ 58. Were modesty characteristic of our times we should blush at the word capital, and not complain that the ancients failed to understand an idea about which the moderns are in utter disagreement. To give a list of definitions would be tedious, and moreover would fail to express the full diversity of view, since the same terms in different definitions are sometimes used in different senses. It is enough to say that economists are not agreed whether capital includes incor-

poreal goods, and if so, whether goods like the State, and like the custom of a business, and like acquired skill and trustworthiness, and like the natural capacity for labour; or only some of these; whether, moreover, it includes only things, or persons as well; whether among corporeal external goods (*i.e.* wealth) the means of enjoyment, when they are finally in the hands of those who are to enjoy them, can ever be called capital; and if so, whether only when in the hands of 'productive labourers' (and who these are is disputed), or also whenever these means of enjoyment are of a durable character, as a dwelling-house (Roscher's *Gebrauchskapital* as distinct from *Productivkapital*); whether, again, capital includes land or only the improvements of land; whether it means only the advance under certain circumstances of previous labour (Lassalle), or only the sum of commodities needed to sustain labourers in work (Mr. Jevons).*

Without engaging in the controversy let us notice some of the reasons why it has arisen. *First*, the radical difference between preparation and enjoyment, and again, between cost and remuneration, and yet the extreme difficulty in each case of drawing any definite line between them. *Secondly*, the fact that what is cost to one person is remuneration to another; thus wages are a remuneration to the hired workman, but cost to the master; the ministrations of the physician are cost to him, but remuneration to the patient. *Thirdly*, the fact that revenue can be obtained by other means than by personal services and by the preparation (including reparation) of wealth; for it can also be obtained by allowing others the use of means of enjoyment, as a dwelling-house or pleasure boat. *Fourthly*, the historical antecedents of the term capital, connecting it with money and loans (κεφάλαιον the principal opposed to τόκος—*caput pecuniae* or *capitale* first used in the Middle Ages) and also with cattle (*capitale* used in this sense in the Middle Ages), and thus indicating a source of revenue indeed, but not any source, and in particular excluding land; and

* See Roscher, *Nationalökonomie*, § 42-45; Adolf Wagner, *Lehrbuch der politischen Oekonomie*, § 27-32; Coquelin et Guillaumin, *Dictionnaire de l'Econ. pol.*, s. v. capital.

thus in England we are accustomed to speak of applying capital to land.

In a way then the term capital is rather historical than scientific,* and I should prefer not to use it in this chapter on primary notions, did I not fear to mislead by omitting it, and did I not wish to express an idea for which it is fairly suitable, namely, of property employed in order that revenue may be gained, an idea quite distinct from that of property employed in production. The latter indeed is always for the sake of revenue, but not conversely. Dwelling-houses, for example, are eminently property employed as means of enjoyment and not employed in production; and yet in modern Europe some of the largest revenues are derived from letting out dwelling-houses. So they are capital to the lessors and means of enjoyment to the lessees, and the same commodity at the same time can serve as capital to one person and as means of enjoyment to another. Let us then define *capital* (*fundus*, ἀφορμή, *capital*, *Stammvermögen* or *Betriebsfonds*) that portion of a man's property which he employs for the sake of net revenue. So it includes the dwelling-houses he lets, but not the one he inhabits; the masquerade dresses he lets out, not the clothes he wears; the wages he pays to the actors if he is the proprietor of a theatre, not the wages he pays to his own private *domestiques de luxe*; the pleasure gardens or grouse-moors he lets, not those he keeps in his own hands; the finished goods he has for sale in his shop, not the finished goods he has just bought for his personal enjoyment. And plainly, according to the definition aforegiven, capital includes all property used in production, though not *only* property so used. Plainly, also, it includes land as much as any other immovable used for the sake of revenue; so the land under tillage, grass, orchards, or timber, no less than mills, shops, foundries, or mines; and it includes these immovables no less than movables like portable machinery or materials. Money is often used as capital but sometimes not; as when hoarded or kept to pay for personal services or for objects of personal

* This has been well remarked by the Socialists; and it is thoroughly unjust when Roscher, *l. c.* § 42, note 2, calls the use of the term by Karl Marx 'quite arbitrary.'

consumption or enjoyment. How far it can be said to be used in production we shall have subsequent occasion to examine. Roads, railways, ships, and all means of communication are generally, when in the hands of private owners, as a railway belonging to shareholders, used by them as capital (though not always, for example not private yachts or the paths in pleasure grounds); but by the travellers are used according to circumstances in preparation or enjoyment; and we have to distinguish the goods train on one side, the excursion train on the other, and between them the ordinary passenger train carrying half its passengers on business and half on pleasure.

§ 59. If the term capital by itself has been involved in obscurity it has been still more so when complicated by the epithets fixed and circulating. Instead of wearying ourselves with controversies which seem merely verbal, let us make the distinctions by which alone we can escape confusion. First of all, capital can be said to serve its owner's purpose in one of two ways. In the one it only serves him if it is wholly or partially alienated, that is, if all or some of the rights of ownership over it are transferred to another person. Thus the way in which a nailmaker gets a revenue from his nails is by selling them; a jobmaster from his horses by letting them out for hire. In the other way capital serves its master's purpose by being kept in hand, that is without wholly or partially changing masters; for example, the tools of the nailmaker and the fuel he uses in his work; the stable of the jobmaster and the oats which his horses eat. The foregoing distinction can be expressed, if we are so minded, by calling that capital circulating which is used in the one way and that fixed which is used in the other.* Only, then, in societies where alienation was unimportant the distinction of fixed and circulating capital would be unimportant also.

* Adam Smith, Bk. ii. ch. i., might seem to employ the terms in this sense, and to be intelligible. In reality he is confused; for if his *fundamentum divisionis* were alienation (changing masters), he could not say: "Every fixed capital is both originally derived from and requires to be continually supported by a circulating capital." For then alienation would be absurdly made an absolute requisite of life.

A second distinction seems to me (following Roscher after a fashion) to be the one which these terms are most fitted to express. Capital is either used as such and in the same manner by its owner only once, and let this be called *circulating capital* : or else repeatedly, and let this be called *fixed capital* (in German respectively *umlaufende* and *stehende Stammvermögen*). Thus the fuel and the iron which the nail-maker uses in his work, and his stock of finished nails, are his circulating capital, whereas his tools and workshop are his fixed capital. The food for his horses belongs to the circulating capital of the jobmaster, whereas his stable and horses are fixed capital. "The draught cattle of the farmer belong to his fixed capital, the draught cattle's fodder and the cattle for slaughter belong to his circulating capital ; in a machine factory a boiler for sale is part of the circulating capital, a similar boiler reserved for use in the works of the factory is part of the fixed capital." (Roscher, *Nationalök.* § 44.) This distinction of fixed and circulating capital, though it would exist were there no alienation, pays regard to this as one mode of using property for the sake of revenue ; and property will be circulating or fixed capital to the alienator according as the alienation is once for all (a sale) or repeated (a lease or bailment). The nailmaker sells a given set of nails once for all ; whereas the jobmaster lets out the same horse again and again, and a house let on lease is used by its owner to yield him rent every quarter ; furnished apartments, every week ; so the nails are circulating capital to the seller, the horse, the house, and the apartments are fixed capital to their several lessors.

A third use of the terms fixed and circulating capital applies them to express the distinction of durable and transient means of production (*vid. sup.* § 52). But the use is not a happy one. For first the word capital is ill-fitted to express means of production, as then we should have to say that those dwelling-houses which enriched the owner by being let out were not a part of his capital ; and secondly the words fixed and circulating are ill-fitted to express durable and transient, as then we should have to say that the finished goods of the ironmonger were fixed capital to

him, though they are of no service to him till he parts with them.*

Notice, in conclusion, that the legal distinction of movables and immovables is not the same as that of circulating and fixed capital in any of the senses aforegiven, or as that of transient and durable commodities. For example, a plough is a durable commodity, and to the farmer is fixed capital (in all the three senses of the term), but is a movable at law.

§ 60. The word exchange has various meanings, popular, legal, and economical. In a wide sense it means the surrender of some good for the sake of another, as when we say a man exchanges the world for the cloister; in a narrow sense it means 'barter,' that is, giving up the entire ownership of one commodity for that of another without the intervention of money; and this, I apprehend, is the meaning of the term in English law.† But for Economics we need a term which, like barter or permutation, shall be limited to alienation of rights over property for the sake of other such rights, but which, unlike barter or permutation, shall not be limited to complete alienation, and to cases where money is not used, and which therefore shall be able to include leases

* Mill is anything but clear on circulating and fixed capital (*Principles of Polit. Econ.* Bk. i. ch. vi. § 1), seeming to give as the two characteristics of the first that it does its work by changing hands, and that it is used up at once; of the second, that it does its work without changing hands, and that it is more or less durable. But then all the materials used in production by those producing for themselves, for example, the seed and manure, the crops of maize, grapes, and olives of many Italian peasants are not circulating capital, because they never change masters, nor fixed because they are not durable. Or if we interpret him to mean that one only of the two characteristics are requisite in each case, then the said commodities are both circulating and fixed: circulating, because used up at once; fixed, because doing their work without changing hands.

† At least in the realm of 'things personal,' where an exchange is the transfer of goods for goods, and sale the transfer of goods for money. The law makes no difference between such exchanges and such sales. The exchange, however, of real property is a contract by itself. Roman law is better than English on this point in not making any distinction between realty and personalty, but worse in making a great distinction, not merely in name, but in legal treatment, between a complete alienation where money intervened (*emptio-venditio*), and one where it did not intervene (*permutatio*). See the discussion *Instit.* l. 3, tit. 23; *Digest.* l. 18, tit. 1, 1.

and sales. For this purpose it seems to me best to use the word *exchange* (*permutatio*, ἀνταλλαγή, *échange*, *Tausch*, *cambio*), which can be defined, the alienation (or legal cession) of rights over property for others in return. Whereon, omitting controversy, of which there is abundance, let us only notice that exchange in this sense includes what is commonly meant by a sale, a lease, an insurance, or a loan; but not gifts, for here there is no return; nor the hire of labour, for here the return is not in the shape of rights over property.*

The definition of exchange enables us to define the word *price* (*pretium*, τιμή, *prix*, *Preis*) as the commodity (or commodities) alienated by either party in an exchange. Or, to put the idea into another shape, the price of a commodity means the commodities given or received in exchange for it. The different kinds of prices and the different ways in which they are reached will be discussed in the Third Book. Here we have only to notice the nature of price and its distinction from value. Price presupposes exchange and is made up of definite measurable commodities, whereas value is independent of exchange and even of commodities, and is a mental habit the result of a mental act of valuation and incapable of being expressed in figures. There can be value without price, as the value to a man of his good name or of his hereditary inalienable fief; but there can be no price without value; for no one takes in exchange a commodity to which he attaches no importance. In order to avoid confusion on value we ought, as I have already remarked (§ 48), to speak, not simply of the value of anything, as of a horse, but of the value of anything to

* The English and Roman law terms, which between them dominate half the world, are of historical growth, not of scientific construction, and thus may be sometimes unfit to express the distinctions needed in Politics or Economics. For example, the English term *bailment* comprises two such different contracts as letting goods out for hire and handing them over to a carrier to be transported. Only the first in an exchange according to our definition. Similarly, the Roman term *locatio-conductio* might apply to the lease of commodities (*rerum*), or to the hire of services (*operarum*). Economists in their treatment of legal terms have to steer between ignorant disregard and servile attachment. In the sense of exchange which I have adopted, but by no means in every sense, we can say with Mr. Thornton (*Contemporary Review*, April, 1875): "No service whatever can possibly be exchanged."

somebody, as of a horse to Titius ; whereas, in order to avoid confusion on price, we ought to speak, not simply of the price of anything, as of a horse, but of the price of anything *in something else*, as the price of a horse in money or in corn, saying, for example, that the price in money is forty pounds sterling, or in corn is 150 bushels of wheat.

Let a word be here added on the distinction which is frequently made between value in use and value in exchange ; the first being taken to mean utility, the second, the power of purchasing. Naturally these expressions in this sense do not accord with the definition of *value* which I have adopted (§ 48) ; the sense seems better expressed by the terms 'utility' and 'price in money,' and to oppose the terms 'use' and 'exchange' is misleading, because exchange is one kind of use in a common sense of this word (*cf. sup.* § 51). It seems therefore best to discard altogether the terms value in use and value in exchange, and without burdening ourselves with further technical terms, simply to notice that wealth can be valuable to a person either directly, being enjoyable, as food or clothing, or else indirectly, and this in various ways : enabling him, as a farm or a factory, a spade or a spindle, to engage in production ; enabling him, as a stock of money, to pay others to produce for him or to minister to his personal wants ; enabling him, as the wares of a merchant, to procure as its price the means of enjoyment or of production.

And now, having laid in a stock of terms sufficient for our immediate wants, let us pass from abstractions and words to the realities of life.

CHAPTER II.

THE EXTERNAL WORLD.

Factors of Production, § 61—The Earth as Man's Dwelling-place, § 62—The Dry Land as supporting Animals and Plants, § 63—The Water as supporting Animals and Plants, § 64—The Earth as affording Minerals, § 65—Destruction by Nature, § 66—Need of Production, and Ease or Difficulty of it, § 67—Intensity of Production, § 68—Intensity in the various Industries, § 69—Law of Limitation to the Capacity of Things, § 70, 71—Improvements in the Arts of Production: Classification, § 74—Conditions requisite to their being made, § 75—Jottings on the History of Technical Progress, § 76-79—Estimate of Gain and Deduction for Loss, § 80, 81—Injuries to the Earth by Man, § 82-84—Possible further Technical Progress, § 85.

§ 61. The capacities of the earth to furnish man with wealth, how far this is given without cost, the limits of what can be obtained even with cost, how material things have received improvement and injury from man, form the object for discussion in this chapter. But we must begin by removing two misconceptions which stand in our way. The first is that the requisites (factors or elements) of production are three, one being appropriate natural objects (Mill), or external nature (Roscher), the other two being labour and capital. But not to speak of the ambiguity of the term capital, this view obscures the simple fact that, alike among the rudest and the most cultivated peoples, the requisites of production fall necessarily under the two heads of persons labouring and things appropriate. We can of course subdivide these heads, and in particular can distinguish the uncultivated, untransformed earth from the earth which has been touched and adapted by man, and call the first nature, the second, though the term is unsuitable, capital. But then we ought to make an analogous distinction among labouring

persons according as they have merely the powers with which nature has furnished them, or have in addition been trained for production ; and if we distinguish the iron in the earth from the iron transformed into a steam engine, or the undrained, unenclosed, uncultivated marsh from the well-tilled field, we ought to distinguish the unskilled labourer from the artizan whose skill is the result of training.* But I doubt whether any such distinction is fruitful, and certainly it is exposed to the great objection that often we cannot tell how much of the capacity of a person labouring or of a thing laboured upon is due to nature and how much to art.† Nor do I see cause for complicating the simple division into persons and things by any subdivision ; and I propose to consider things in this chapter and persons in the next.

The second misconception is that 'nature' helps more in one kind of industry than in another, notably more in agriculture than in manufactures ; as though we could say that the properties of the thread, the needle, and the linen gave less assistance to the seamstress than the properties of the soil and the seed to the farmer, or as though, since persons and things are both absolutely needed for production, we could measure their relative importance. We might as well attempt to decide which half of a pair of scissors has most to do in the act of cutting (Mill). We can no doubt measure the hours of labour and the amount of means of production requisite for a given object, and if two objects, A and B, differ in one requiring six hours of labour, the other twelve, and the one requiring the consumption of twelve tons of coal, the other of six, we can say that A requires less labour than B, and more of the transient means of production ; but we

* Schäffle, *Nationalökonomie*, 3rd ed. § 37, distinguishes, as the four 'elements of technic': (1) natural personal goods of which the sum forms *das Naturell*; (2) acquired personal goods of which the sum forms *die Bildung*; (3) natural external goods of which the sum forms *die Natur*; (4) acquired external goods of which the sum forms *das Vermögen*.

† The confusion on the requisites of production may in part account for the curious spectacle of certain English economists and politicians denouncing the appropriation of land, that is, the means of agricultural production, by a few, and yet failing to denounce the analogous appropriation of the means of manufacturing production.

cannot say that labour does less or is less important for A than for B.*

§ 62. The capacities of the earth to furnish man with wealth can form the subject-matter of many volumes, and can give an additional charm to the study of physical science. Here let us be content with that brief survey which is necessary for the purpose of Economics. And for this purpose the external world can be put under four heads or divisions, which seem more useful than any which might be based on the classification of physicists.†

Under the first head we look on the earth as man's dwelling-place. To begin with the climate in regard to its effects, distinct though often connected, upon our health, our enjoyment and our capacity or opportunities for labour, the diversity of different regions is very great. Compare the fever-stricken dwellers in the Tuscan marshes with the robust peasants of the Apennines; the icy winds and salt dust of Central Asia with the soft and equable climate of Singapore; the South of Mexico where each year there are several harvests, with the North of Russia where each year agricultural work is limited to four months. Only let us avoid exaggeration. The healthiness of different countries seems to vary much more through artificial than through natural causes; we may grow indifferent to the discomforts or to the delightfulness of the climate to which we are accustomed; perhaps as much physical force may be exerted by a native in the tropics as in the temperate regions; and if darkness, or frost, or tropical rains hinder outdoor work in certain seasons, these need by no means be periods of idleness. And instead of making rash generalizations regarding the influence of different climates, it is more profitable to look at

* Roscher (*Nationalökonomie*, § 47) is thoroughly misleading when he makes three great periods of economical development, in the first of which 'nature,' in the second 'labour,' in the third 'capital,' is predominant. For, omitting other criticisms, external nature, as seen, for example, in the powers of flowing water, of steam, of electricity, does as much now as in the time of the Heptarchy. And if we substitute machinery for men, there may be less labour in the production of a given object, but the labour still required is none the less important and indispensable.

† Though not closely following, I borrow much from Schäffle, *Nationalökonomie*, 3rd ed. § 62, 63.

these differences when considering the fitness of many social institutions. The regulations of industry, the kinds of recreation, the precautions against dangers to family life, the military organization and much else, may need to be very different according to differences in heat, moisture, and light.

The surface of the earth, like the climate, is very various, and in particular with regard to its fitness for communication. Compare regions like the prairies, the pampas, or the Australian pasture lands where vehicles can pass for hundreds of miles without serious obstacle (Hearn, *Plutology*, ch. v. § 6), with the mountains of Switzerland, the impenetrable silvas of Brazil, the marshes of the Netherlands. Water, however, rather than dry land has been pre-eminently the pathway of mankind, and the settlement of the world seems to have mainly been carried along the sea-coast or the banks of rivers and lakes. Compare Europe, having one mile of coast to every 31 square miles, with Africa, having one to every 142 square miles; and the scanty rivers of Australia or Persia with the water communication in the basins of the Mississippi and St. Lawrence, the Amazon and the Volga. We must not indeed forget quality as well as quantity of the means of navigation. Seas may be dangerous like the Bay of Biscay, or deficient in harbours like the south-east coasts of Africa and of the United States; or be frozen over for a part of the year like the Baltic; or be liable to dead calms, as the South Seas; or on the other hand possess useful currents or trade-winds. And rivers may or may not be dangerous, rapid, or shallow; they may be obstructed near their sources which matters little, or near their mouths which matters much; they may or may not have the great advantage of ebb and flow of the tide in the lower portion of their course. Obviously both for seas and rivers it is of great importance whether they afford an uninterrupted way. If the sea broke through the isthmus of Corinth little would be added to the quantity but much to the quality of the coast-mileage of Greece. As, however, so much can here be altered by man, we should look less to whether navigation is interrupted (river systems as a fact almost always are) as to whether the interruptions can or cannot be easily overcome;

whether the work is as easy as making the Neva communicate with the Volga or the Mississippi with the St. Lawrence ; or whether there are miles of sand as at Suez, or of rocky hill as at Panama, or of rapids as on the river Madeira, in the way. And if in other things alike, rivers running east and west are inferior in usefulness to those running north and south, because these, as the Rhine, Mississippi, La Plata, connect lands with greater diversity of produce than those, as the Danube, St. Lawrence, Amazon. (Roscher, *Ansichten der Volkswirtschaft*, 3rd ed. I. p. 242.)

Under this first division of the external world can also be placed the force of the wind or water used to set our machinery in motion, the use of light as in photography, and of electricity as in telegraphy.

§ 63. The second division of the external world is the dry land as the supporter of animals and plants. Let us distinguish the actual presence of useful animals and plants and the absence of noxious ones from the possibilities of introducing the useful, extirpating the noxious, and substituting the more for the less useful. This process of improvement will be considered later on in this chapter ; the actual distribution of land, plants, and animals can be learnt from works on physical geography ; and here it is sufficient to notice that the absence of useful ones from a given country which is physically adapted for them matters much or little according as the inhabitants have or have not the opportunity of easily introducing them ; as the lack of domestic animals in Australia, serious for the aborigines, of little moment for the English colonists. Similarly as to noxious or less useful plants and animals, the means of lessening or removing them, as clearing a tropical forest, extirpating tigers or wolves, may be wanting to one race or one period but possessed by another. The physical limits to acclimatization or extirpation whether of animals or plants we can pass by. But we must presently look to the question not of how far it is possible to acclimatize or to extirpate in a given case, but of how far it is worth while.

The capacity of the dry land at any time to support vegetable life of service to man can be called its fertility, which is a not simple physical quality, but depends upon a combin-

ation of causes, some of which can be controlled by man much, some a little, some not at all. We can exhaust and replace the nourishing properties of the soil, and can often remedy by draining or irrigation the excess or defect of moisture. Much less can be done in changing the consistency of the surface soil, its capacity to absorb or retain moisture or heat, the nature of the subsoil, and the steepness of the land, though, for example, the terraces cut in the steep sides of hills shew how much can be done where it is worth while.* The great factors rainfall and warmth can only be a little influenced by man, and then as a rule only gradually, by clearing or replanting forests. The advantages of a warm climate for agriculture are very great. The crop is sooner ripe and allows the same land to be used several times a year; the quantity of the crop is generally greater, the quality better; fewer buildings and stores are wanted, and less labour, which moreover is not confined to certain seasons. Notice that we have not simply to look at the mean temperature, but also at the extremes of heat and cold, because some plants can bear great winter cold but need great summer heat; and *vice versa*. So in parts of Siberia with a mean temperature below freezing point, rye and wheat do well because the summer is hot, whereas in Iceland with a much higher mean temperature no cereals can be grown from lack of summer heat. So Hungary is a wine country in spite of its bitter winter, whereas in England, while laurels survive the winter, grapes will not ripen in the summer.† Without attempting a catalogue of useful land plants and land animals, let us notice that the former may be roughly grouped under the five heads of food plants as wheat or vines, fodder plants as grass or mulberry trees, wood plants as the oak or the bamboo, textile (or fibre) plants as flax or the cotton tree, and miscellaneous as the indigo plant

* Roscher, *Nationalökonomie*, § 35, distinguishes, in judging of the agricultural productivity of a piece of land, its capacity to bear a plant-nourishing surface (*Tragfähigkeit, emplacement*), which even a naked rock like Malta may have; secondly, its capacity for cultivation (*Baufähigkeit*), as its consistency and powers of absorption; thirdly, its immediate capacity for nourishing plants (*unmittelbare Nährfähigkeit*).

† On the preceding points see many details in Roscher, *Nationalökonomie*, § 32.

or indiarubber tree. Narcotic plants as opium or tobacco might be classed as miscellaneous or as food plants, or as a separate (and sixth) head. As to animals, they can be put under four divisions according to their use, though the same animal may sometimes come under more than one division. They may be used for food, as swine and poultry, sheep and oxen; for affording materials, as the wool, hides, fur and feathers, of sheep, oxen, ermine, and ostriches; for motive power, as oxen and horses; lastly, for amusement, as dogs and horses in most countries, as snakes in India, canary birds in England, and bulls in Spain. The uses and relative importance of different kinds of animals vary immensely according to time and place. For example, the use of pork, mutton, and wool, of primary importance in Europe, is comparatively small in the tropics. Oxen are used in the South for little else than for serving as draught cattle; in England they are hardly used for this purpose at all. Fighting cocks, the delight of half the world and of our ancestors, have become distasteful to one class of Englishmen and forbidden to the rest. And if we are to make any generalizations as to mankind at large, let us say that the ox, from its widespread use in the past and the present, can be called pre-eminently the economical animal, while the horse can be called pre-eminently the political animal.*

In comparing our use of animals and plants it can be said, I think, that for none of our main wants have animals been more in use than plants. But certainly their relative use has been much less for some wants than for others. Thus for fuel, housing and furniture, compare the vast use of wood with the use in some treeless regions of dried cow-dung for fuel, of skins for tents, of ivory or leather for furniture. In supplying food the part of the animal kingdom is much greater, but still, at least in historical times, has been only a fraction of the part supplied by vegetable food. But for clothing the use of wool and leather has rivalled that of linen and cotton, though at present the balance has been turned

* If we look on animals simply as affording motive power, the following may perhaps be given as their order in utility: oxen, asses and mules, horses, camels, elephants, llamas (in the Andes), dogs (notably in the Arctic regions), goats, carrier pigeons.

by the partial substitution in Europe of cotton for wool. For lighting the fat of animals can compare with vegetable oil ; and though for implements wood and hemp may be of more service than leather and bone, the vegetable kingdom has no set-off to the motive power afforded by domestic animals, the importance of which in economical life we shall have occasion to see.

§ 64. The third division of the external world is the water as the home of animals and plants ; and although by no means so important to us as the dry land, it is probably much more so than is commonly imagined, and moreover there seems a likelihood that its relative importance may increase in the future. At present there is a striking contrast in our dealings with these two great departments. While the majority of the human race are engaged in cultivating land plants, the cultivation of water plants is as yet so small as to be below notice. While on land the plants are more valuable to us than the animals, in the water the animals are incomparably more valuable to us than the plants. While on land the wild animals are of little value to us compared with those we artificially preserve, the water animals under our control (in fish-ponds, oyster-parks, etc.) are of little value to us compared with the free inhabitants of the seas and rivers. But these contrasts may diminish. The art of fish-breeding (pisciculture), using fish in the popular sense, may become as important in Europe as in Western Asia, and in the rest of Europe as in France ; means may be found to extend our control over the fish in the open sea ; and we may learn how to turn to account the gigantic stores of what we now contemptuously term seaweed. Mr. P. L. Simmonds (*The Commercial Products of the Sea*, London, 1879, Part II. ch. xii.) describes the various uses to which seaweed has actually been put, notably for chemical and medicinal purposes, as for iodine ; for manure, as in North-Western France, in Cornwall, in the West of Ireland, and in New England ; and for food, as a little in Europe and America, but much more in China, Cochin-China and Japan. And the Japanese not only themselves consume various kinds of seaweed but export it to China in large quantities, and not only collect it but cultivate it.

It remains to be noticed that this third division of the external world has hitherto been mainly used to furnish food, and in a less degree means of lighting; but for little else of general use except sponges. On the other hand certain notable articles of luxury have been got from the inhabitants of the waters, as Tyrian purple of old and sealskins now; also pearls, coral, mother-of-pearl and tortoiseshell.

§ 65. The fourth and last division of the external world is the earth as affording minerals, whether from the dry land as iron, or from the water as salt; whether from the surface as brick-earth, or from below the surface as tin; whether minerals proper as lead, or improper, that is having arisen with the co-operation of living force, as coal. The use of proper and improper minerals is in sharp contrast, the one class being used mainly for buildings (stone, brick), instruments (iron), money (gold, silver, copper), and adornment (precious metals, precious stones); the other class almost entirely for being burnt for fuel or light; so coal, peat, and rock oil; exceptions are in the use of asphalt for pavement, coprolites for manure, amber for adornment. And both classes of minerals contrast with the organic life of land and water in affording so little for food and clothing, salt being the main exception. Another important difference is that in the main they cannot be restored, and the skill of man is thus confined to the discovery of their existence, their locality, their usefulness and the best mode of obtaining and using them, and not to keeping up or increasing the stock of them.* And this is of practical importance; for though as yet the exhaustion of any of the chief minerals in the world is only a matter for the remote future, the exhaustion in a given country may be a matter of immediate concern, as of the Laurian silver mines for the ancient Athenians, or of the coal mines in modern

* The increase of the stock of minerals that is actually going on by the work of nature, as of peat, lava and stalactites, is, I suppose, too insignificant to be of much account. The artificial production by the skill of chemists may extend much further, but is of value for Economics as opposed to chemistry only so far as such production is not merely scientifically but industrially profitable; and this is little likely except for those which are very rare and mainly used for adornment.

England and Belgium, or of the petroleum wells in North America. Nor must exhaustion be taken to mean that the mineral is altogether removed, but that it can no longer be obtained in large quantities without costs that swallow up remuneration. So a nation whose greatness rests on its mineral treasures is ill-assured of the future; the very nature of minerals, their being applicable to comparatively few uses, implies that they must be exchanged if they are to be a great source of national prosperity; and this brings the risk of being supplanted by other mines in more favourable circumstances. Of these circumstances two of the chief are the right juxtaposition of minerals, as in England, (where iron is found close to coal, and there is abundant lime near at hand, three great requisites for the iron trade;) and good means of transport, with which England again is abundantly provided, whereas their absence renders much of the mineral stores of South America unavailing.

§ 66. Not as another division but as another aspect of the external world is the destructive power of nature. The meaning of destruction and damage has been explained already (§ 52); and we are now concerned with injuries to things not to persons; but also not with all destruction and damage, but only with that which is the work of nature as distinct from man. Amid the many kinds of natural destruction, it is difficult to put order, but four heads can be made provisionally. The first is decay, from which few things are exempt, but which varies immensely with the object, the place, and the season. The combination of heat and moisture gives perhaps the greatest likelihood of decay. In the rainy season in the tropics "books on the shelf swell till three take the space of four, books on the table get covered in two days with mould $\frac{1}{8}$ inch deep; saltpetre must be swept off the walls in basketsfull every week, or it would eat away the best brick" (Roscher, *l. c.* § 209). But great dryness, as in Thibet, can be injurious to woodwork; and frost helps the decay of stonework and plaster. Perhaps a dry and temperate climate is the least exposed to this first head of destruction. The second head comprises the diseases of useful plants and animals, and particularly when they assume the form of an epidemic. Murrain among

cattle is an ancient and frequent scourge, while the potato disease and the phylloxera among vines are recent and familiar examples of this kind of destruction. The third head comprises all sudden damage by the elements, by fire and lightning, storms and hurricanes, by floods and breaking in of the sea, by hail, earthquakes, eruptions, avalanches, landslips, sandshifts. Very different in different countries is the frequency or importance of such disasters, and England may owe not a little of her greatness to their fewness or insignificance within her borders. She suffers nothing from volcanic agency, nothing from avalanches; and how much worse are the fires in Russia, the hailstorms in Germany, the floods in France, the storms and lightning in the tropics. The fourth head consists of destruction by animals and plants.* As a popular classification destructive animals may be classed as wild beasts, vermin, destructive birds, reptiles and insects. The wolves in Russia devour annually, it is said, 500,000 geese and 100,000 dogs. (*The Academy*, April 28, 1877.) Among the hill-tribes of Burma come at intervals of forty or fifty years myriads of hill-rats, settling down on a tract for two or three years and reducing it to a desert. (C. J. Forbes, *British Burma*, p. 283.) The injuries by birds (as those eating the crops and fruit in England) and reptiles (as snakes destroying cattle in India) seem less important, whereas the ravages of insects seem the most terrible of all, notably of the locust in Arabia and the surrounding countries, of the so-called white ants (termites) in parts of Africa and S. America, and of the tsetse or poison fly of S.E. Africa, the sting of which is fatal to horses, dogs, and oxen. Of destructive plants Mr. Hearn (*Plutology*, ch. v. § 9) gives examples from Australia. "In the warmer latitudes of that country a plant (*Strychnus lucida*) is found which contains strychnine in considerable quantities, and has often caused great mortality among flocks and herds. At Port Essington it is so common that cattle, to ensure their safety, must be kept in enclosures, and supplied with artificial food. In some districts on the Upper Murray and the Darling, there

* The distinction between the injury from blight and murrain on the one hand, and from poisonous plants and animals on the other, is a rough one sufficiently exact for our present purpose.

are plants which produce in horses strange and fatal forms of madness. In parts of West Australia, little pea-like flowering plants (*Graptololium bilobum*), containing a deadly poison, are found in such abundance as to render the districts in which they occur useless for pastoral purposes."

The failure of crops resulting from wet or cold seasons, or on the other hand from drought, the scourge of warm latitudes, can hardly be put down to the destructive forces of nature, but rather to the suspension of her productive forces. Many fires being artificial (due to carelessness or kindled on purpose, as by criminals or in war) cannot be classed among cases of natural destruction. And the loss of human life through noxious beasts, as in India, where many hundreds are killed every year by tigers and many thousands by snakes, is not to be called destruction or damage, since it is not an injury to the property, but to the person of the sufferers.

§ 67. Several material goods, some of primary importance, are at hand ready for enjoyment and not requiring preparation. Such are the warmth and light of the sun, the air, drinking water, wild fruit trees, caves fit for dwelling in, flowers and beautiful scenery. But of these many are only local, and can thus be only enjoyed without cost by those on the spot: witness the expense of drinking water in many towns and districts (deep wells, costly aqueducts and water towers), and the sums paid by Englishmen to enjoy the scenery of Switzerland. And even air and sun, though in a sense universal, vary so much in quality, that just as the invalid goes at great cost to drink the waters at a mineral spring, so too at great cost he quits the air of the flats for that of the hills, and the sunlight of the North for that of the South. In some parts of the world indeed it seems possible that man might exist without any preparation of wealth, that is without production; but there could scarcely be any clothing, but little variety of food, and a scanty, scattered population. But for life at all in many parts of the globe, and for rational life in every part, wealth must be used not simply for enjoyment but also for preparation; in other words, production is requisite for man. And if we suppose the same physical constitution and the same training and knowledge of those engaged in production, the ease or difficulty

of the process will depend on the points mentioned in the four preceding sections, from a combination of which depend the physical advantages of a country. That some countries are more favoured than others is undeniable, as England than Iceland; but also many countries are less so than they seem, as the tropics, where exuberant fertility is counterbalanced by periodical total failure of crops, by earthquakes, or by hurricanes, or again by the continuous ravages of noxious animals. We must look to the negative as well as to the positive advantages. (Hearn, *Plutology*, ch. v. § 10.) And then, as in fact men differ and have differed vastly in their capacity for production, the most advantageous country for one epoch or race is not so for another; for example, an open and somewhat 'barren' region is more advantageous to early colonists or to rude people with little mechanical knowledge than a region covered with exuberant tropical forest. Another question is whether great ease or great difficulty in production, at any rate of the first necessities of life, has not an injurious effect on man. "Those earthly paradises," says Roscher (*Nationalökonomie*, § 36), "where bread itself is only picked as fruit, allow man's vigour to slumber as certainly as the cold wastes of the polar regions allow it to grow numb." But such questions I leave to others, and am ready to accept whatever is proved, but nothing more; and will here only remark that wherever existence in physical health is possible to man, there also, it seems to me, the good life is possible which is the end of both Politics and Economics.

§ 68. Let us turn from the external world in itself to the action of man upon it. If we look at a farm where the ploughing is but a few inches deep, where the land is neither drained nor manured, where the cattle and sheep, the carts and horses, the farm buildings and farm hands are few, and then look at another farm well tilled and well stocked, we see that within a given area and given time much more has been done in the second case than in the first. A word is needed to express this difference, and although the phrase high farming as opposed to rough and ready farming is in use, a more scientific term is needed, and one which will apply to other branches of industry besides those included

under farming. And so I use the term *intensity of production* to mean the amount of labour and property which in a given state of the arts of production is employed in any industry within a given space and given time. Where the amount is relatively great, production is *intense*, where relatively little, little intense;* to increase the amount is to *intensify*, and the process is *intensification*; to lessen the amount is to lessen intensity. But the comparison is only made if there is no change in the arts of production. For example, if through the advance in agricultural knowledge deep ploughing is now less expensive than was surface ploughing 200 years back, we are not to say that modern farming is less intense than the ancient if, *ceteris paribus*, less is spent on ploughing than of old; for the arts are no longer in the same state. Else we should have to say that England was more highly farmed in the fourteenth century than now.† Nor does intensity regard only the property or only the labour expended, but both. So there may be intensification even though less property be expended, because the diminution may be out-balanced by increase of labour, as when on a given farm many labourers using only spades take the place of a few labourers who used horses and ploughs; or conversely, as when in the carrying business in a given town a few men with carts and horses take the place of an army of hand porters. Moreover, as we cannot accurately measure labour (*vid. sup.* § 55), we cannot in any case accurately measure intensity; and the difficulty is increased when we have to compare the employment of labour and property, because we have no common standard by which they can be measured, no common denominator to which they can be reduced. And thus it is often difficult in a given case to judge whether there has been an increase of intensity, whether

* The Germans use the adjective *extensiv* and oppose the term *Extensität* to *Intensität*. But this is not necessary, and in English we could hardly use 'extensive' in a sense so unlike its usual one.

† According to Mr. Rogers, in a note to his edition of *The Wealth of Nations*, Bk. ii. ch. iii., the capital employed in cultivation, compared with the market value, was in England in feudal times as three to one, at present as one to three, the change being the result of agricultural improvement. See his *History of Agriculture and Prices*, i. pp. 34, 55, on the deficiencies of mediaeval husbandry.

the greater employment of labour has or has not been counterbalanced by a smaller employment of property, and conversely. But to imagine that because mathematical precision is here unattainable, there is nothing of great moment to be learnt, would be an error. Let us then begin by seeing how the notion of intensity, which is by no means confined to agricultural production, is applicable in each of the main industrial departments.

§ 69. In agriculture look at a wheat farm in Lincolnshire with its stately farm buildings and neat whitethorn hedges, and where there is unremitting application of manure ; and then look at a farm in the Far West, with its rude wooden log hut and sheds, the straw and stubble burnt, a stream turned into the farmyard to wash away the manure, many stumps of trees encumbering the land. How little is done to a rice field in the plains of Burma, where all the irrigation is from the annual overflow of the rivers : how much in parts of India where the water has to be brought at great cost from a distance. In England an acre of land used as market garden has much more labour and property employed upon it than an acre used as arable land, and this more than an acre of meadow land, and meadow land more than pasture, and pasture more than woodland. And thus we can say that the market garden is cultivated with more intensity (or receives more intense cultivation) than the arable farm, and so forth ; similarly that there is a greater degree of intensity in production at the farm in Lincolnshire than at the farm in the Far West. And in Ohio, which was once the Far West, but where now the farming is much more careful and even artificial manure is used (Correspondent in *The Times*, Oct. 15, 1879), we can indicate the change by saying there has been intensification in agriculture.

In rearing live stock, compare a great cattle farm of many square miles in the South American Pampas, where for 5,000 cattle about five herdsmen are sufficient, whose work is to ride with their dogs round the estate two or three times a week to keep in the herd and to keep out wild beasts, and once a year to drive the herd together, mark the yearlings, geld those two years old and take for slaughter those from three to four years old (Roscher, *Ackerbau*, § 17), and an equal area of

land used in England for cattle-breeding, with costly buildings, numerous enclosures, artificial food, careful attendance on each individual beast. Similarly, compare an Australian sheep farm and an equal area of the chalk downs of Sussex.

In a forest sometimes nothing is done but to fell and remove the timber; sometimes there is protection to the young trees (as by fences) lest they be destroyed by animals, as by oxen and goats; sometimes, besides this, there is artificial planting. These are three degrees of intensity in forestry. A fishery may be worked by few men with rough and ready appliances, or by many men with costly boats and nets. In the first case the given area of water is worked with less intensity than in the second. We can obtain coal sometimes by merely digging at the surface or easily out of the side of a hill, sometimes only after having sunk deep shafts and spent much on appliances for freeing the mine from water and for raising the produce. The working within the given space in a given time is done in the second case with more labour and property than in the first, and therefore the mode of production is more intense.

In manufactures we may take two mills of the same size and compare the amount spent within each on machinery, materials, etc., and the number of workpeople employed; and, according to the outlay, say that production is more intense in the one than in the other. Or we may take a given district, as South Lancashire, or the Black Country, or East London, and compare the amount of property and number of persons employed in manufactures within these areas with an equal area in an agricultural county or the West of London, and say there is greater intensity of manufacturing production in the one than in the other.

In transport the main requisites and sources of outlay are the way or route, the vehicle, and the motive power. In proportion to the outlay within a given time for a given distance under these heads there will be greater or less intensity in transport.* Compare a sea route where the ex-

* As transport is not confined to production, and as the same means of transport are often used for both persons and things, for enjoyment as well as production, and as moreover the notion of intensity is applicable to personal service as well as to production, we can for transport give a

penses are almost confined to the two terminal points, or again a rough mule path, with a well-made carriage road, a canal, or a railway. And among railways compare those of America without fences, with level crossings, single lines, sharp curves, steep gradients, and the English trunk lines, fenced in, bridged over, with double or even treble lines, going through hills, not round or over them. Compare the former *diligence* of the Continent with the English stage-coaches, the mule with the horse, the horse with the locomotive, a small sailing vessel with a vast Atlantic steamer, a punt for crossing a river with a steam ferry-boat.

Lastly, as regards commerce or the business of facilitating exchanges which may be the final stage of production, how different is the amount of labour and property yearly engaged in this process within a great town and within an equal space of the country. Compare the many well lit shops of London, with plate-glass windows, marble pillars, and well-dressed attendants ever ready to attend to customers, with the single shop in a country village, or with a store in a backwood settlement where the storekeeper is only to be found at certain hours of the day. And we can say that the intensity of commerce is greater in the town than in the village or the settlement.

§ 70. Now can be explained a physical law of the utmost importance in Economics, and which can be called the *law of diminishing returns*, or the law of limitation to the capacity of things. It can be expressed by saying, intensification after a given point yields less proportionate return. Plainly there is a limit to the utility of which any given mass of property is capable, however much we labour upon it, however much we apply other property to it. Toil as we may, spend what we may, we cannot get a year's food for a thousand men from an acre of land though we choke it with seed and manure, or clothing for a hundred thousand from one small factory though we choke it with cotton and machinery. And long before the limit is reached each fresh outlay will not bring a proportionate increase in the return. Up to a

special definition of intensity, namely, the amount of labour and property which in a given state of the arts is employed in a given time on the transport of passengers and goods between two given places.

certain point double the outlay may give double or more than double the return. For example, if the outlay on ploughing has been small, to increase it by a third may increase the crop by a third or even more ; but to increase it tenfold will certainly not increase the crop tenfold. A certain amount of outlay is necessary before a mill is of any use at all ; spend a third more on the structure and its use will probably increase by more than one-third. Double the number of workmen, quintuple the amount of raw cotton, and you may be more than repaid ; but in time the limits are reached when it is profitable, and at last when it is even possible, to place another loom, or pound of cotton, or workman within that factory. A steam-engine to work at all needs much outlay ; the fresh outlay to make it work well is more than covered by the increased returns ; but if we spend more and more on it we soon reach the point when the returns no longer increase in proportion, and at last no additional returns at all will be obtainable. And thus we use many acres to supply us with food, not one acre ; similarly, not one but many mills and steam-engines to supply us with clothing and motive force.

§ 71. Two groups of errors are common about this law of limitation. One ignores the existence or importance of the law, as though an owner would not then have all his land untilled except the most fertile plot ; but this optimism can be noticed as far as need be later on. The other error makes the law only applicable to agricultural or extractive as opposed to manufacturing industry, and has greater plausibility. For it is true that the point at which intensification begins to give less proportionate return is seldom reached in manufactures, because the alternative of enlarging the area of production, setting up another factory or engine, is generally available, whereas it is sometimes absent in agriculture, mining, and fishing, and if present is often only available at greater cost (by the land or mine resorted to being less fertile), whereas in manufactures this has hitherto been rarely the case. Also, as a fact, intensification has hitherto often enabled production to be carried on at less cost in manufactures, transport, and commerce (naturally the arts remaining the same), by making greater co-operation

possible, whereas in agriculture this has been, at least in historical times, less frequent. How production is helped on by co-operation will be seen in the next chapter (*inf.* § 97). Finally, improvements in the arts of production have in recent centuries been more conspicuous in regard to manufactures, and notably transport, than in regard to agriculture, and have served to mask the inevitable limitation. But it exists none the less, and the point in question is not what improvements may effect, or what has been the course of history, but whether in a given state of the arts within a given area and given time there is any check from the nature of the external world to indefinite production at unaugmented cost. And there is.*

§ 72. To the very practical question, what is the fit degree of intensity for a given time, place, and industry, I can now answer that this must depend on the amount of the product of that industry then and there required. To begin with

* Mill, *Principles of Polit. Econ.* I. xii. 3, confuses the historical and physical question, and only allows the law of diminishing returns to be ultimately applicable to manufacturing history, because the 'materials of manufactures' are 'all drawn from the land.' As though if 'materials' were ever so abundant a single factory could go on increasing its produce indefinitely; or as though in time all the most advantageous sites for factories would not be occupied. Mr. Hearn, *Plutology*, ch. vi. § 10, rightly urges that the law of diminishing returns is not peculiar to land; but his mode of proving it seems to me unsatisfactory. As to Senior's dictum, enforced by capital letters: "Additional labour when employed in manufactures is MORE, when employed in agriculture is LESS efficient in proportion" (*Polit. Econ.*, being vol. vi. of the *Encyclop. Metropolitana*, p. 81), and his illustration to confirm it, that the effect of an increased demand is very different upon manufactures and upon raw produce; that in England, for example, the demand for lace and wheat were it doubled in each case would make lace cheaper and wheat dearer: I answer that though in modern England this might be so, yet under other circumstances just the reverse *might* happen: the greater demand for wheat enabling more men to work at it might enable a very fertile district hitherto forest or swamp to be cleared or drained and the wheat got at less cost; the greater demand for lace hitherto met by women working at odd times must now encroach upon more precious hours, or the work having hitherto been all done at one fully occupied large factory, in the best position, with the best machinery known to the arts of the times, the factory must now be enlarged at a more than proportionate cost, or another built in a less favourable situation, and thus the lace grow dearer.

agriculture and taking as simplest the case of a peasant owner self-supporting, self-sufficing (so as to avoid the complications of exchange) ; given a certain knowledge of agricultural art, and a certain amount of corn, fruit, vegetables, flax, wool, and meat requisite for his family, the degree of intensity with which his farm is cultivated will depend upon its size and fertility ; that is, more must be done to the land the smaller or less fertile it is, in order to obtain a given result ; as is plain. And if the family grow more numerous and more is required, this addition, presupposing that the arts are unchanged, can only be obtained from the same land by intensification, that is, more elaborate production. This change may at first give a more than proportionate result. For example, the greater numbers of the household may now render possible some work of drainage, irrigation, or clearing hitherto impracticable. But sooner or later the point is reached where further intensification gives a less proportionate return, as is plain from the last section. Still it is worth while to intensify even at increased proportionate cost, if more agricultural produce is required and cannot otherwise be obtained. But it would be foolish if either of these conditions was absent ; foolish, that is, if no more produce was required, or if by leaving the old fields to lie fallow awhile and by tilling the adjacent unoccupied prairie, the produce required could be got with less cost. And what has been said of a single family applies to a great community. The sparser the population of a given region the less elaborate need be the agriculture ; and intensification presupposes that more produce is required. In some societies an indication of this requirement is afforded by the price in money of agricultural produce ; and here for a farmer whose main aim is to sell his crops, it is only worth while to cultivate up to that point of intensity beyond which the increased expense of raising any larger quantity would not be repaid by the current price. It is, therefore, an error to think high farming is the same as good farming, and to confuse intensification and improvement. The elaborate culture of Flanders, of Lombardy, of the English Eastern Counties, would be ridiculous in Minnesota or Poland ; the careful saving of refuse so commendable in China, would be foolish in Russia ;

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and of two adjacent and similar estates that one is farmed well, however roughly, which makes the farmer prosperous, and that one ill, however highly, which makes him a bankrupt. Nor can we say, supposing the average yield of wheat to the acre is in England 30 bushels, in Holland $28\frac{1}{2}$, in Belgium $20\frac{1}{3}$, in France $13\frac{1}{2}$, in Hungary $8\frac{1}{2}$, in Russia $5\frac{1}{2}$,* that English farming is better than that of these countries. It may only be farmed more highly, and the extra yield obtained at a more than proportionate extra cost. And experience shews the error of premature intensification. 'Enlightened' owners in the Baltic provinces settled German peasants on their domains to cultivate them more highly than heretofore: the settlers had to return penniless, and the owners lost heavily by their speculation. In Mecklenburg an attempt was made to imitate the high farming of the Scotch lowlands, and failed; as also many attempts at reclamation in the Campine of Brabant on too expensive a scale.† But what may be folly in a speculator may be wisdom in a peasant who loves his country and his family, and who, rather than forsake them, will laboriously reclaim a barren hill-side, though the work would inevitably ruin any joint-stock company which undertook it. But the peasant

* According to C. P. Bevan, *Industrial Geography Primers, Great Britain and Ireland*, p. 53. Really the French production is much higher, perhaps one-third higher, than the figure given. See a letter by Mr. Waters in the *Daily News*, 24th Sept. 1879.

† These and other examples are given by Roscher, *Ackerbau*, § 30. Adam Smith, though misleading to others and perhaps to himself by using the term 'progress of improvement' for intensification, is aware of the distinction. "Loss must be the necessary consequence of improving land for the sake of a produce of which the price could never bring back the expense." (*Wealth of Nations*, Bk. I. ch. xi., part 3, p. 105, ed. McCulloch.) In pleasing contrast to the narrow-mindedness of some English travellers are the remarks of Mr. H. C. Barkley, *Bulgaria before the War*, pp. 173, 174, that he first despised the rude style of Bulgarian husbandry, but learnt to modify his opinion; that, indeed, better implements, as iron ploughs, might save much time and labour (this would be improvement not intensification); but that "it pays better to bring fresh land under cultivation, rest the old land and crop a larger area, than to expend labour on keeping the old land in a fertile condition by deep ploughing and manuring. In few parts is there any dearth of land, so the farmer can always break up virgin soil, and give that which has been cropped a long rest."

does not farm too highly ; for he uses precisely that degree of intensity which will give him the produce required ; nor can he then and there get what he requires in any other way. And thus the particular circumstances of every district must be known before we can say what degree of intensity in agriculture is fitting there.

§ 73. In the other industries no less than in agriculture the quality and quantity of the product required are decisive on the fit degree of intensity. As the pampas are gradually overspread with farms and immigrants, it will become worth while, if they are used for cattle, to expend labour and property in order that the same area may support more numerous and better cattle. The multitude of men and boats at the Caithness herring fisheries would be absurd were that country alone the consumer of the fish, but is reasonable when England and Europe are waiting to be supplied. But it would be a great mistake to double the number of the men and boats, or to spend much more on each boat if there was no good expectation, either that the take of fish would be proportionately increased without decrease of their price in money, or else that if the costs would be more in proportion there would be a corresponding rise in the price. Of mining the same might be said, only that here a special danger of intensification is the likelihood that a fresh mine may be discovered easier to be worked and able to supply the same market. Then if there is no great increase in the demand for the given mineral, the fit degree of intensity will be lower than heretofore ; and the owners of the old mine will find to their cost that their preparations are far too elaborate for the results. In manufactures, if a village blacksmith set up delicate and costly machinery in his workshop, he would be ruined in a few weeks ; but a great iron-worker might be equally ruined by not setting up this machinery. In the one case there would be excess, in the other defect of intensity. Heaps of wealth and troops of workpeople are employed in the cotton manufactures within the narrow limits of South Lancashire. This is reasonable because half the world buys the produce ; but the intensification may be overdone, and mills and machinery stand unused and workpeople idle. In transport perhaps more than in any other

industry the fit degree of intensity should be carefully looked for, because of the likelihood and the mischief of here confusing intensification with improvement. It can only be profitable to increase the outlay on transport between two places if there is an increase in the demand for transport, that is, if there are more passengers or goods to be carried (quantity), or if people are ready to pay more for more commodious and rapid carrying (quality). For example, the great expense of running express trains is only reasonably incurred on the supposition that there are passengers able and willing to pay for this convenience. The great expense of making and keeping a railway supposes far greater traffic than what would be necessary to repay the costs of a carriage road. While a railway or canal may be required to connect two towns, a road is enough for two villages, a lane for two hamlets, a footpath for two cottages. Unhappily this truth has not always guided political and economical potentates in the modern construction of railways, witness those up the Peruvian Andes, where a mule path would have been sufficient, or into the North American wastes to the loss of credulous shareholders; and some of those in British India to the loss not of the shareholders, but of the native peasants who have to pay the guaranteed interest. Lastly, in commerce the quantity and quality of goods to be exchanged determine what degree of outlay on the process within a given space and time is fit. The beach is a good enough fish market for a little fishing village, but not for a great seaport. The splendid market-halls of Paris might with advantage be imitated in London; but if they were imposed on Calais or Dover they would bring either town to municipal bankruptcy. A jeweller can afford to keep open his shop for comparatively few customers and purchases because of the fine quality of his goods; a grocer or baker must make ten times as many exchanges if his business is to succeed. And from the foregoing examples we can see that the more favourable a given place and given commodity are for transport the greater is the possible degree of intensity: were Lancashire surrounded by mountains it would not have the world for its customer; its favourable position for transport is a pre-requisite for the intensity of manufacturing

production within it ; and another pre-requisite is that cotton goods are so fit for being transported, unlike common earthenware or bricks, or, again, unlike fresh milk or fresh flowers, which are too bulky or too perishable to be carried far.

§ 74. But intensification is not the only way in which men within a given time and space have obtained an increase of means of enjoyment. Were it so the inhabitants of thickly peopled countries like England or Belgium would be suffering the extremities of toil and privation, if indeed they were able to live at all. In reality the history of mankind tells of numberless improvements in the arts of production, which can be expressed by the phrase industrial invention or technical progress, and which must be regarded not as a mere accidental or temporary check to the influence of the law of diminishing returns, but rather as an essential part of the relation of man to the external world.

I find it difficult, so various are the arts and improvements, to arrange them in any satisfactory order ; and the following heads and distinctions are only tentative and provisional.*

To begin with the ways in which an improvement is of advantage to us, we can perhaps distinguish eight heads. The first and most general can be called the saving of labour, whereby a given result can be obtained with less labour, as when a crane is used for unloading ships instead of unassisted manual labour. The second head is the increase of result from a given amount of labour, as when a better constructed plough or a better chosen manure increases the yield of the farm. The third is the saving of time (simply and distinct from any saving of labour), as when skins instead of having to soak for many months can be tanned as well in a quarter of the time by being soaked in close vessels from which the air can be withdrawn. The

* The varieties of improvements are discussed by Babbage, *Economy of Machinery and Manufactures* (4th edit. 1835), in the first part on 'mechanical principles' ; by J. S. Mill, *Princ. of Polit. Econ.* Bk. I. ch. xii. § 3 ; and by Mr. Hearn, *Plutology*, ch. x. Though I borrow much from them, in particular many illustrations, I fail to find in them any satisfactory classification of improvements. Some illustrations are also taken from Mr. C. P. Bevan, *The Industrial Classes*, 1876-77.

fourth head of improvement is when a better sort of result is obtained—improvement in quality—as when, by the use of the lathe and the sliding rest, we can make with complete accuracy the various parts of some complicated mechanism, as of a telescope ; or by the art of printing or moulding can produce a number of objects exactly similar ; or by domestication can improve the quality of animals and plants till they are ten times more useful to us ; or when the duration of an article is increased, as of wood by being tarred or painted, or of iron by being galvanized. The fifth head is when some new means of enjoyment is obtained, as when maize or potatoes were first used as food, and the fibres of the cotton plant for clothing, and when clay by the invention of brickmaking became of use for durable houses, and when worthless rags or straw were found to serve for paper. The sixth head is the saving not of labour simply, but of the danger, unhealthiness, or unseemliness of certain kinds of labour, as by the safety-lamp in coal mines ; by the wool-combing machine instead of the former unhealthy combing by heat, usually done with charcoal braziers ; by inventions in making pottery, sparing boys much of their former unhealthy and oppressive toil ; by the fans which remove the steel dust formerly so fatal to the grinders. The seventh head is a saving of the materials employed, as when by using a saw instead of a hatchet or adze for cutting a tree into planks, about one-eighth part only of the wood is wasted instead of over one-half ; or when by substituting machinery for hand-work half the quantity of ink is sufficient for the same amount of printing ; or when by the discovery of the hot blast process the consumption of coal per ton of cast iron made was reduced from seven tons to two or two and a half tons (Jevons, *The Coal Question*, p. 316). And under the seventh head also can be placed the more economical use of instruments, as distinct from an improvement in their quality, for that belongs to the fourth head ; whereas the contrivances for saving the wear and tear of machinery come here. The eighth and last head is when we can do something that we could not do at all before, as when by mechanical contrivances we can raise weights which we could not have done previously with any amount of labour, and register time,

heat, moisture, rainfall, wind-pressure, and strike or hurl with a force and with results previously unattainable.

The improvements in the arts considered in themselves rather than in the way in which they benefit us, can, I think, be roughly grouped under the following heads :—

a. Mechanical processes, as the use of tools like a spade or a reaping-hook, or the use of machinery like a steam-engine or a sewing machine ; or, again, processes, like draining or irrigation, or the use of grease to lessen friction. *b.* Chemical processes, as smelting iron, manuring, and bleaching cloth, making cheese, or soap, or wine, or glass, or pottery. *c.* Motive forces, as the discovery of how to use the draught power of animals, and the forces of water, wind, steam, and electricity. *d.* Utilization of fresh material, that is, the discovery of the use (or fresh uses) of organic or inorganic substances, as of Tyrian purple from shell-fish ages ago, or of coal in mediæval England, or the modern utilization of woollen rags for making a rough cloth. *e.* Introduction or improvement of plants and animals, as when the olive was transplanted to Italy, potatoes and maize to the Old World, cattle and horses to the New ; and when the knowledge was obtained that gave to the South the mule and the edible date-palm, and to the North the noble breeds of horses and the rich harvest of the orchards.

§ 75. Improvements in the arts do not happen anyhow, but only under certain conditions. These are discussed by Mr. Hearn in an interesting chapter (*Plutology*, ch. xi.) under the title of the circumstances which determine the extent of invention. As the first of these circumstances can be taken the state of the physical and mathematical sciences. It would be an error to think that much knowledge of these is necessary if the arts of production are to be anything but rude and feeble. On the contrary, accumulated experience, especially when transmitted in hereditary trades, may raise many arts to a high degree of excellence, though their scientific foundation be unknown. "Parchment and paper, printing and engraving, glass and steel, gunpowder, clocks, telescopes, the mariner's compass, were all known, and the processes which they severally imply were successfully practised at a period when the corresponding sciences had no

existence. Even at the present day many processes of our most successful arts have not yet received a scientific explanation. In the manufactures of porcelain, of steel, of glass, and in many other arts, the chemical principles are yet unknown which would explain the conditions of success or failure in their manufacture." And Le Play says (*La Réforme Sociale*, ch. 32, § 3, 5th edit.): "Having devoted twenty years to studying the methods of metallurgy throughout Europe, I have often found that the superior workmen, who hand on from one to another the tradition of the art, have a clear perception of chemical reactions not yet known to scientific men." To say with Mr. Hearn that in all empirical arts the limit of improvement is soon reached, seems a rash generalization. But he rightly notices how empirical art has been the parent of physical science, and how this has repaid its filial debt by generating scientific art, which is characteristic of modern times. Thus "the electric telegraph is directly derived from the experiments of Oersted, and the investigations of Ampère. Watt's greatest improvement in the steam-engine sprung from his steady apprehension of an atmological principle. The safety-lamp was the result of scientific enquiries by Davy. It is owing to the researches of chemists that a bale of cotton can be bleached within a few hours after it has been manufactured. Liebig has indicated to the farmers both the manures appropriate to each kind of soil, and the localities where the manures are likely to be found."

A second point is the practical ingenuity of the heads of industry enabling them to apply the results of science. We see how in Europe and America they watch the course of scientific discovery so as instantly to seize on any practical advantage which it may afford to industry; whereas in China the knowledge of gunpowder and the compass was of little use for want of practical ingenuity.

A third point regards not the head that plans, but the hands that execute the work. Since delicate manipulation is often essential for improvement, manual dexterity is often requisite, and to get skilled workmen a great difficulty for new inventions. Thus the alchemists and the earlier printers had themselves to make their own apparatus;

when engineers already knew the properties of iron, they were hindered using it for bridges because the founders could not cast it in large masses; and Watt could scarcely get cast straight the cylinders for his condensing engine.

A fourth point is the state of the kindred or subsidiary arts. No invention can be considered absolutely, for one art is dependent upon another. Thus "the art of navigation depends upon certain astronomical observations, and so upon the art of constructing astronomical instruments. The latter art in its turn depends upon the art of manufacturing glass; and the glass manufacture again involves several other distinct arts. To no science does industry owe more than to chemistry. But the success of modern chemistry is largely due to the superiority of the instruments it has been enabled to employ. 'Without glass, cork, platinum and caoutchouc,' says Liebig, 'we should probably at this day have advanced only half as far as we have done.'"

A fifth point is the strength of the motive for improvement. Mr. Hearn makes this the most important of all. Where there is a will there is a way. The great advantage to be got by improved communications in a commercial country like England may perhaps have led to the invention of the locomotive; but the relation of cause and effect is plainer in the not infrequent inventions of labour-saving machinery by masters in order to get rid of, or get the better of, their highly paid or untrustworthy workmen;* or, again, in discoveries called forth by the desire to evade tariffs or monopolies, as when Napoleon's commercial policy stimulated the production of sugar from beetroot, and occasioned the discovery of how to get soda from common salt. Plainly where there is much exchange and competition, and where the heads of industry are not protected from bankruptcy and ruin, and at the same time not debarred from almost unlimited advance in wealth and power, the motive to make improvements in the arts may be very strong. Mr. Hearn (*l. c.* ch. xvi. § 11) notices the modern eagerness for invention, and how "many of the

* Two examples of the invention of labour-saving machinery occasioned by a strike among the workmen are given by Babbage, *Econ. of Machinery and Manuf.* § 362, 363.

large manufacturers in Lancashire and Yorkshire employ skilful mechanics at high salaries for the sole purpose of suggesting improvements in their machinery." And plainly, also, if the law or the absence of law is such that the inventor is likely to get little profit for his pains, one great motive for invention is removed.

As a sixth point (not noticed by Mr. Hearn till later on, ch. xvi. § 1, and called by him the influence of capital upon invention) can be added the need of wealth in order that the inventor may have time to learn, to think, and to make experiments, and may be able to pay the expenses of applying the invention to practice. And we see that for working almost every important patent the aid is needed of some man of wealth.

If the foregoing circumstances are all present at once it is quite natural and not mysterious that many important inventions are made almost simultaneously by independent enquirers.

§ 76. The actual history of technical progress is a subject matter worthy of a great writer and of many volumes.* Here I will not attempt even the rudest outline, but will only give as best I can a few fragmentary remarks. First, it can be said that the history of the arts has till quite recent times been national rather than universal. Arts

* The absence of a critical history of technology is noticed by Karl Marx, *Das Kapital*, pp. 385, 386, note, 2nd edit., who urges its great importance, and goes so far as to say, p. 166: "Nicht was gemacht wird, sondern wie, mit welchen Arbeitsmitteln gemacht wird, unterscheidet die ökonomischen Epochen." But he exaggerates in materialistic fashion the importance of mere physical instruments, when in reality the different economical epochs depend on the moral relations of man, and these, though influenced by the industrial arts, are in no servile subjection to them. It is true that for prehistorical times the division into the stone, the bronze, and the iron age is often made, and this precisely is to distinguish epochs according to their physical instruments. But supposing the aforesaid division is justifiable at all, it is only so because we are unacquainted with the moral life, the economical and political relations of the three periods in question. Of course a great technical change is likely to require a corresponding change in the laws and customs which were specially adapted to the previous state of the arts. But the essential features of the previous social relations need not be changed. This matter will be discussed at length in the book on Economical constitutions.

have been known for centuries in one country and unknown in others. For example, artesian wells, common in China from remote antiquity, and known to the ancient Egyptians, became unknown in the West for centuries till rediscovered in modern times. (See G. P. Marsh, *The Earth as Modified by Human Action*, London, 1874, p. 480.) The miller's art declined much in Italy at some time after the fall of the Western Empire, and for a long period the only good bread obtainable was made by German immigrants; and in France shortly before the Revolution the amount of meal obtainable from a given amount of grain was greatly increased by an invention that for centuries appears to have been known to the Germans, and was known to the ancient Romans. (See Beckmann's *History of Inventions*, art. Corn Mills. Ed. Bohn, 1846.) Again, it is plain there has been no regular progression, but often decline, in certain branches of the arts. Examples have already been given, and I can refer to the contrast of the agricultural skill and knowledge of the present inhabitants of Babylonia, with the same country 3,000 years ago. Even in England the practice of marling land known in the reign of Elizabeth seems to have been lost, and not recovered till the beginning of the eighteenth century (*Quarterly Review*, April, 1858, p. 400). And I expect a long list might be made of arts lost for a time or altogether. Another point is the local limitation to certain discoveries. For example, the substitution in England of a green crop (as the turnip) for fallow, has been called the greatest improvement ever made in agriculture, and compared to the invention of the steam-engine and spinning frame (*Edinburgh Review*, Jan. 1836, p. 327). But the advantage of this change is limited to certain climates, and even there does not apply to every kind of soil. Another region of the earth has profited by the discovery made in the remote past of how to graft the olive-tree, and how to convert the juice of the grape into wine; while a still warmer zone has been made habitable by two great discoveries of the Babylonians, one the art of making sweet and edible the fruit of the date-palm, the other the domestication of the camel (Hehn, *Kulturpflanzen und Hausthiere*, Berlin, 1870, p. 180).

§ 77. Perhaps we can make a sort of negative generalization, and say that till the eighteenth century there had been many great changes in the arts of production, but no revolution like that which followed and transformed the whole face of industry. So the manufactures and modes of transport and, though not the plants, at least the methods of agriculture in Western Europe in the year 1700 were more like to those of Ancient Rome, nay of Ancient Greece and Syria, than to those of the present day. I do not know if the Greeks and Romans did much more than learn and apply with the needful local modifications the industrial arts which had so flourished among the different branches of the Semitic race (Carthaginians, Phoenicians, Assyrians), and which had perhaps been taught by the Accadians ages before to their Semitic conquerors; nor do I think that in the period commonly called Classical Antiquity, Europe was enriched with many such improvements as the new sort of water mills and the introduction of the silkworm in the time of Justinian, the invention of stirrups soon after his time, the use of windmills in the eleventh century, of the compass in the thirteenth, of gunpowder in the fourteenth, and then in the sixteenth of maize and the cactus for the south of Europe, of potatoes and buckwheat for the north;* besides the invention of knitting stockings about the beginning, and of the stocking-loom about the end of the same century.

The technical revolution which has been witnessed for several generations may perhaps best be characterized by saying that it is the result of physical science applied to industry. The industrial arts have become, at least many of them in many places, scientific instead of empirical (*cf. sup.* § 75, *ad init.*). Karl Marx, though often untrustworthy, seems on this point as touching manufactures to have some good

* Hehn, *l. c.* p. 385, notices the importance on the rocks and wastes round the Mediterranean, of the South American bluish-green prickly Opuntian cactus (*Opuntia ficus indica*) for hedges, for fodder (from the leaves), and for food during four spring months (from the juicy fruit). Perhaps one of the most useful improvements of the Western World during Classical Antiquity was the spread thither from Persia of the domestic fowl, unknown to the ancient Egyptians and the Semitic races (not mentioned in the Old Testament), and reaching Greece in the sixth century B.C. (Hehn, *l. c.* pp. 225, 226.)

remarks. On the foundation of a certain division of labour instead of the primitive multiplicity of employments, each special branch of production obtained its suitable technical form, perfected this gradually, and crystallized it rapidly as soon as it reached a certain degree of excellence. Occasional changes resulted from new materials and from gradual changes in the tools. When once the suitable form was obtained the industry became rigid, as we see from its being often transmitted from one generation to another for a thousand years. It is characteristic that right into the eighteenth century special manufacturing industries were called mysteries; and only those could penetrate into the obscure region who had been correctly initiated. Industry on a large scale (*die grosse Industrie*) tore aside the veil that hung around and between the different crafts, and created the new science of technology; and by technology the few main forms of motion were discovered, which all productive action of the human body must assume, however various the instrument used. New chemical and mechanical processes changed the old ways of production and the old boundaries of trades, and, moreover, made the normal condition of [many departments of] industry revolutionary, so that instead of its being wise to stick to one's trade—*ne sutor ultra crepidam*—we need industrial versatility and polytechnical schools (Marx, *Das Kapital*, pp. 511–515).

§ 78. The middle of the eighteenth century can perhaps be taken as the date when the technical revolution began, and, beginning in England, raised the country of its birth to an undreamt of height of power and wealth. Let us glance at the transformation in four conspicuous departments of industry. In the preparation of clothing ('soft' goods or textile industries) three notable and successive processes are carding, spinning, and weaving. About 1750 the inventions of John Kay and Robert his son, doubled the productive power of the weavers. These could now use more yarn than could be spun by the spinners; but in 1767 the weaver Hargreaves invented the 'spinning-jenny,' enabling one spinner to do the work of eight, and soon afterwards Arkwright, by the invention of the 'water-frame,' a still more efficient instrument of spinning, "suppressed the principal

manufacturing function of one-half the human race." (Le Play, *Les Ouvriers Europ.* p. 123, 2nd edit). Spinning had been for ages the ordinary and characteristic occupation of women, the distaff was their sign, and the legal term 'spinster' for unmarried women is a witness that times were not always like our own, when not one spinster in a hundred has so much as seen a spindle. So if it be true that the wife of Arkwright destroyed his models, she did but do battle, though it was in vain, for her sex. Meanwhile an invention (by Lewis Paul) superseded the ancient and lengthy process of hand-carding, and soon the advantages of the 'spinning-jenny' and the 'water-frame' were united in the invention made by Crompton and called the 'mule.' But a machine for weaving instead of the hand-loom was wanting, till Cartwright, in 1785, devised the 'power-loom,' which in a way affected the domestic industry of men as the spinning machines that of women, and changed this great branch of industry from hand-work into machine-work. Finally, before the century ended, the subsequent processes of bleaching and (for some goods) printing received such technical improvement that bleaching could be done more than thirty times as quickly, and printing could be done with nearly a hundred times less labour; while one great material of the textile industries was able to be obtained in sufficient abundance by the 'cotton-gin'—the invention, in 1792-3, of Whitney the American.*

The practical application of steam as a motive force had as an historical antecedent the use of coal for the preparation of iron, and has repaid the benefit by making the coal beds the industrial centres of the world. About the middle of the eighteenth century the possibility of smelting iron with coal instead of wood was proved in practice (though discovered over 100 years before); and a gigantic growth in the iron trade began. In a few years the use of steam as a motive force was

* The transformation of the cotton manufactures was followed at a certain interval by that of the worsted manufactures, in which the first spinning-jenny was put up at Bradford in 1790, the first spinning factory established in 1793: power-looms began to be made use of about 1825. (See Henry Forbes, in *Lectures on the Results of the Exhibition of 1851*, vol. ii. p. 310.)

made of practical importance by the discoveries of James Watt, who took out his first patent in 1769, and other inventions followed, mechanical and chemical, applying to coal, iron, and steam, two notable steps forward being, first the spread and improvement by Henry Maudslay of the slide-rest (already known to the French and Dutch), which, by enabling the precise geometrical forms needed in machinery to be themselves machine-made, did almost as much for the extension of machinery as the inventions of Watt; secondly, that of the safety-lamp (perfected 1815) by Sir Humphry Davy, enabling the most dangerous mines to be worked with comparative safety, and thus vastly increasing the available supply of coal.* In smelting iron the plan of heating the blast previously to its being forced into the furnace was adopted in Scotland in 1830 with extraordinary saving of fuel, each ton of iron requiring now only two tons of coal, or even less, instead of seven as before (S. H. Blackwell, in *Lectures on the Results of the Exhibition of 1851*, vol. ii. p. 173). Another great improvement adopted in England in 1845, and some years previously in the United States and on the Continent, was the application of the waste gases given off at the furnace-head to the purposes of raising steam and heating the blast (*Ibid.* p. 174). The proportion of fuel previously lost was calculated—it seems incredible—to be no less than 81½ per cent. (Lyon Playfair, *Ibid.* vol. i. p. 168).

§ 79. In the department of transport the revolution has been, if not greater, at least more striking; but is too familiar to need many words. Its leading features have been the application of iron and steam; iron railroads were made in the last third, iron bridges in the last quarter of the eighteenth century; steam was applied to navigation by Bell in Scotland, and Fulton in America, before 1815; and in that year George Stephenson took out a patent for his locomotive, and the era of steam transport, on land as well as on sea, began. This technical revolution is to be well distinguished from the great material change which had historically gone before it in the English means of transport. The roads were perhaps

* Much of the foregoing description is borrowed from Mr. Spencer Walpole, *History of England*, vol. i. pp. 56-75; and some from Marx, *Das Kapital*, pp. 399, 400.

worse in the middle of the eighteenth century than in the fourteenth or fifteenth, when their good repair was favoured by the need, among other reasons, of easy communications for the clergy and pilgrims ;* and though canals for navigation had for long been in use on the Continent, there was not one in England till 1755. But in the reign of George III. hundreds of miles of canals and excellent roads were constructed ; and hundreds of stage-coaches drawn by horses at a speed of ten or twelve miles an hour, daily traversed the country before the period of railways.† But those who know the difference between intensification and improvement can see the difference between this change, which consisted mainly in applying more labour and property on the transport between given places in a given time, and kept to the ancient technical method of the wheeled vehicle drawn by horses on a road : and that later change, which consisted mainly in applying a new method of transport, with iron rails for the way and steam for the motive power.

The art of agriculture, at least in the northern temperate zone, has been also the subject of a technical revolution in recent times. Naturally, I am not speaking of the reclamation of waste lands and the enclosure of commons : the mere spread of cultivation is not an improvement in the arts ; but I am speaking of technical progress. The light soils of England became before the middle of the eighteenth century the scene of two notable improvements—one the practice of marling and claying, the other the substitution of a crop of turnips for fallow, both spread by Lord Townshend. The latter half of the century witnessed great improvements in breeding sheep and cattle for slaughter (production of meat) ; and in Scotland a better method of ploughing was spread by William Dawson. But not, I think, till the present century can we speak of a revolution in agriculture. This has been chiefly in the form of two notable changes, first the applica-

* See the interesting remarks in Mr. J. E. T. Rogers' *History of Agriculture and Pr. ces*, I. pp. 95, 96, 134, 138, 139, 653, 654, 664.

† Mr. Walpole, *l. c.* pp. 78–90, describes in glowing terms the introduction of canals and the improvements in roads. But to sing a paean is one thing, to form a sober historical judgment is another ; and the latter is wanting in Mr. Walpole's description of the technical revolution.

tion to agriculture, of machinery, and finally even of steam as a motive power; secondly, the application of chemical science, and the consequent use of artificial manures, new treatments of the soil and its plants, new methods of feeding live stock. These two changes are plainly not confined to the special circumstances of one country, and in fact I suspect that in the first Great Britain may have been outstripped by the United States, and in the second by Germany, the fatherland of Liebig; nor do I see any permanent bar to their extension to semi-tropical and even tropical regions.* Whereas the improvement known as deep draining, and first applicable when the brickmaker's art devised cheap drain pipes, though fostered by government and adopted with enthusiasm in the fifth and sixth decades of this century, is hardly, I think, of world-wide importance, like the discoveries of Liebig, but only a local improvement for the heavy clay soils in the moist climate of the British Isles.†

§ 80. It is sometimes possible to put into figures the technical advantage which an invention bestows. Thus it has been calculated (Babbage, *Economy of Machinery and Manufactures*, § 5) that the force needed to move a stone amounts to the following parts of the stone's weight:—

Along the roughly chiselled floor of its quarry nearly	$\frac{2}{3}$
Along a wooden floor	$\frac{3}{5}$
By wood upon wood	$\frac{5}{9}$
If the wooden surfaces are soaped.	$\frac{1}{6}$
If rollers are used on the floor of the quarry.	$\frac{1}{32}$
If these roll over wood	$\frac{1}{40}$
If they roll between wood	$\frac{1}{50}$

Mr. Hearn (*Plutology*, ch. x. § 2) notices the calculations of Chevalier in 1841, that in the preceding four or five centuries the increase in the productive power in the manufacture of iron had been as 25 or 30 to 1; of cotton, and this within a century, as 320 to 1; and that the labour of one

* Naturally, in most tropical climates, iron agricultural machinery is of no use unless it can be secured from rust.

† Useful accounts of the *technical* changes in English agriculture are to be found up to their several dates in the *Edinburgh Review*, Jan. 1836, and *Quarterly Review*, April, 1858. But of the economical changes they give a picture, to speak mildly, at variance with the truth, and painted with the rosy hues which for liberal economists were then *de rigueur*.

American in the transport of goods was in 1841 as effective as the combined labour of 6,657 subjects of Montezuma. And other illustrations are given by Mr. Hearn. In India a good spinner will not be able to finish a hank a day, while in England one man usually attends a mule containing 1,088 spindles, each of which spins three hanks a day, so that his labour is to that of the Indian as 3,264 to 1. "Forty years ago it is said that three men with the appliances then used could with difficulty make in the day about 4,000 sheets of paper. With the improved machinery now [1864] in use, the same number of men can produce daily 60,000." At the time of the Great Exhibition of 1851 calculations were made to shew the advantages of agricultural machinery: that by the use of the horse-hoe the English farmer could get done better for 6*d.* to 9*d.* per acre what by hand cost 3*s.*; that a threshing machine worked by steam power would cost him 7*d.* per quarter of corn instead of 3*s.* 5*d.* if the flail was used, and moreover yield five per cent. more; that the reaping machine would cut with one-third of the cost of the sickle; that perhaps as much as 70*s.* per acre was saved on the turnip crop by the use of improved cutting machines (John Wilson, in *Lectures on the Results of the Exhibition of 1851*, vol. ii. p. 37); and, although there may have been exaggeration, there was also much truth in Mr. Pusey's estimate that during the twelve previous years a saving of one-half the expenses of the main operations of husbandry had been effected by mechanical inventions.

But let us be on our guard, or such calculations will delude us. First, when we are told of a vast improvement in a given process, say in grinding corn, we must look to how much of the cost of the enjoyable commodity, say bread, is comprised in that process. And if it is but a small fraction, say one-twentieth, then let us well remember that the greatest possible improvement in the given process is comparatively unimportant, and never can lessen the cost of the article by quite so much as a shilling in the pound.

Secondly, we must look at the proportion of the total expenditure of the various classes of the population upon the commodity which is made cheaper or newly introduced. The greatest possible improvements in the production of

pins or pepper would be comparatively unimportant; like the introduction into England of parsley or asparagus; and though these articles were to cost a thousand times less, living would scarce be one-thousandth part cheaper. But if the improvement seriously affects some article in great use for food, for dress, for habitation, or, if in cold regions, for fuel, a real step forward is made in technical progress, as the cheapening of cotton and woollen cloth, the importation of cheap corn into England first possible after great improvements in means of transport, the introduction of maize into Southern Europe.

Thirdly, let us not confuse mere change with improvement. Different plants and animals may be reared, different articles manufactured, to suit different tastes and habits, without any real technical progress. Thus the introduction into Europe of tobacco, and perhaps even of tea and coffee, is to be looked on, not as an improvement, but as a change.

Fourthly, let us neither confuse improvement with intensification, on which I have already given sufficient warning (§ 72, 73), nor forget that every human society which ceases to expand over the earth and yet does not cease to grow, must sooner or later meet the stern law of diminishing returns, which can be counterbalanced 'only by improvements. These are not therefore to be made the ground of vain exultation; but we ought to understand that the four factors, the growth of societies, the law of diminishing returns, the escape from this law by the dispersion of men, and the neutralization of this law by technical progress, result in a providential equilibrium. Whereon I will speak in a subsequent chapter.

Fifthly, our calculations of gain lose what little precision they may have had when, as often, there is attached to the change some disadvantage which has to be deducted, and which may range from a slight drawback to an evil so grave that the gain is overbalanced by the loss, and the change is no longer an improvement but an injury. Let us look at some examples.

§ 81. The artificial drainage of the surface or subsoil may be very advantageous to agriculture, but may injure the streams and rivers, by charging them all at once with the rainfall which previously reached them only by degrees;

and they may thus alternate between flood and dry, both disastrous to their valleys, instead of having as formerly an almost uniform body of water. (Marsh, *The Earth as Modified by Human Action*, p. 445.) Irrigation, in some parts of the world indispensable for agriculture, may in time injure or ruin the land by a deposit of salt, like the saline efflorescence known in India as 'Reh' (*l. c.* p. 468). The introduction of rice into Italy has given rise to a lucrative branch of rural industry; but the rice fields are hot-beds of disease; and domestic animals as well as men are attacked and die (*l. c.* p. 467).

The mechanical improvement known as the substitution of machinery for hand-work, may also be attended by grave disadvantages. As opposed to a tool a machine can be best defined as a contrivance by which the instrument working on the given material is not in the hand of the workman, but forms part of a mechanism. For this is what makes all the difference. As long as the instrument is in the hand of the workman, it is bound up with his bodily organism; and the number of instruments which he can use and the rapidity with which he can use them, are restricted by the limited capacities of this organism. But when the instrument is taken out of his hand and, as I should say, ceases to be a tool and becomes the operating part of a machine, these restrictions are swept away, and we see a sewing machine doing I know not how many stitches a minute, and a spinning jenny using a dozen spindles, a stocking frame many thousand needles, at once.*

The substitution of machines for tools, or, if I may so speak, of mechanical for organic work, may bring advantage to us in several of the ways already mentioned. (*Sup.* § 74, first, second, fourth, and sixth heads.) But there may

* In this description of the nature of machinery, I have followed Karl Marx, *Das Kapital*, pp. 384-388, whose interesting remarks seem, as the phrase is, to hit the right nail on the head. To say a machine is merely a complicated tool, and a tool a simple machine, may do for mechanicians, but is useless for economists. Nor is it well to say that for a tool the motive force proceeds from man, for a machine from some external agent, as wind, water, or an animal; for then a plough drawn by oxen would be a machine, and Claussen's circular loom, which, set in work by a single workman, does 96,000 stitches in a minute, would be merely a tool.

be attendant evils which can be classed in three groups, aesthetic, psychical, and physical. First, then, not so much the fine arts, as the artistic character of the industrial arts may suffer, and the work of the living individual phantasy may be replaced by the dull uniformity of a lifeless mechanism. "In India," says Mr. Birdwood (*Handbook to the British Indian Section, Paris Exhib. 1878*, p. 56), "everything, as yet at least, is hand-wrought, and everything, down to the cheapest toys and earthen vessels, is therefore more or less a work of art." So once in Europe.* But I will not attempt to estimate the magnitude of the injury which machinery has inflicted on the beauty of common life; and I will pass to the second group of evils attached to it, and not unconnected with the first, namely, the injury to the mental state of the workmen. The great majority having to perform some mechanical operation which requires little thought and allows no originality, and which concerns an object in the transformation of which, whether previous or subsequent, they have no part, cannot take a pleasure and a pride in their work; and instead of being idealized and made an end in itself, it becomes an irksome means of obtaining subsequent enjoyment. It is true that a man's trade is not his entire life; but I doubt whether any efforts in the hours of leisure can make up for the loss of a man's trade as a means of mental cultivation. The third group of evils attached to the introduction of machinery comprises the injurious effects upon the bodily organism of the workmen. I am not speaking of the incidental injuries which, though actually suffered in this century by multitudes, especially women and children, at work on machinery, are yet in no essential connection with their employment; I am speaking of what is inevitable: the noise, the dust, or

* Mr. Samuel Smiles, who will not be suspected of being *laudator temporis acti*, notices (*Industrial Biog., Ironworkers and Toolmakers*, p. 21) how the mediaeval blacksmith, in the tooling, chasing, and consummate knowledge of the capabilities of iron, greatly surpassed the modern workman, since he was "an artist as well as a workman"; and how "the numerous exquisite specimens of his handicraft which exist in our old gateways, church doors, altar railings, and ornamental dogs and andirons, still serve as types for continual reproduction."

the heat, and in particular the injury to the nerves through the uniformity and monotony of the work, and the suppression of all variety in the play of the muscles. What is wearisome is not so much great muscular effort, which machinery has in fact rendered less needful, but rather the ceaseless strain, the uninterrupted continuance of effort.*

Another drawback to many of the inventions which have transformed modern manufactures is the pollution of the streams and the atmosphere, with the consequent destruction of fish and vegetation. Thus many green and beautiful districts in England have been changed into horrible blackness and desolation, and though perhaps, in spite of their gloom, as healthy as ever, yet scarcely fit to be the permanent abode of any class of men. And let those sober-minded persons, who comprehend alone the argument to the pocket, remember the immense expenditure in England for the purpose of evading or undoing the pollution of the atmosphere in manufacturing towns and districts : the daily transport of thousands outside the area of smoke, the endless washing, scrubbing, scraping, painting, renovating, and replacing.

§ 82. To the five points given in § 80, of which the fifth has been illustrated in § 81, and all directed to keep us from being blinded by the dazzling spectacle of technical progress, I add a sixth. The earth by man's action upon it has become in some ways and places less fit to be his home and to give him nourishment. Already we have seen some examples (§ 81) of this evil when connected with technical progress. Here let us look at it apart from such progress. And then it can roughly be divided into six heads.

First comes the exhaustion of the soil by agriculture.† The means of nourishment which plants obtain from the soil are able to be exhausted ; and physical science sternly tells

* If asked why I have said nothing of the terrible social evils, the cruelty and oppression, the misery and degradation, which have been historically connected with the introduction of machinery, I answer, that this chapter is not concerned with social relations, and that these and their historical changes will be considered when we are considering economical constitutions. And the evils in question are no necessary consequence of machinery : they might have been averted, and, as far as still existing, *can* be removed. *Cf. sup.* § 76, nt.

† See the very interesting discussion in Roscher's *Ackerbau*, 7th ed. §§ 23*, 41*, whence many of the remarks that follow are taken.

us that unless *all* is restored, which has been drawn from the soil, the cultivation is exhaustive (*Raubbau*). So "not merely all the unconsumed remnants of plants (straw, leaves, oil-cake, etc., and especially ashes), all excrements of the men and animals nourished from the soil, but also the final remains of the animals themselves, and of all utensils, clothes, etc. made from the vegetable or animal products of the soil," must be restored to the land; and though the produce be for long undiminished, the soil only gradually yielding up its riches as it is gradually disintegrated, the cultivation is none the less exhaustive, only the exhaustiveness is masked. Such agriculture indeed may be for given times and places, notably in new colonies and overwooded regions, the right sort economically; and exhaustive farming is not the same as bad farming. Still, though the special circumstances of a given country or region may allow or enjoin exhaustive agriculture, the fact remains that some of its capacity for supporting man is lost by that country or region. The capacity indeed may not be lost to the world, but only shifted in part or wholly to another district, as when a great city fed with corn which has been grown and oxen which have been bred in remote provinces, enriches its suburban districts with its refuse, and the gain of these districts is some compensation for the loss of the remote provinces; or when a country importing bulky produce (corn hides, timber,) gains what the exporting country loses.* But

* The terms *leiochomes*, *isochomes*, and *pleochomes* are used by Fraas to express the three divisions which can be made of all lands, according as they grow poorer, or keep the same, or grow richer, in regard to their stock of nourishment for plants, the Greek *χῶμα* (= earth thrown up or dug out) being used for this stock. Both nature and man cause the distinction of the three sorts of lands. River deltas are pleochomous, and along every valley are likely to be three parallel zones, the river sides pleochomous, then an isochomous zone, and finally the leiochomous hills. The tillage of land, by bringing up to the surface the means of nourishment, causes the surface of the field to be pleochomous, and below it two layers, the upper one isochomous, the lower one leiochomous. Round every centre of the production or consumption of agricultural produce—round every farm and hamlet, and still more round every great town—are probably three concentric rings, the inner one pleochomous, the outer one leiochomous, and a middle isochomous ring, giving to the inner ring about as much as it gets from the outer. (Roscher, *Ackerbau*, § 23*.)

very often what is lost is mostly or wholly lost to mankind, as when the English mode of sewage sends annually, it has been calculated, into the sea the means of reproducing nourishment for 3,500,000 men. And the loss by the mode of draining London has been calculated to be as much as if ten million quartern loaves were daily sent floating down the Thames into the sea. Although among old countries we are unrivalled in our wastefulness, we are not alone ; and in general it can be said that the great cities of Europe are absorbing the fertility of the open country and giving little of it back. The dream has been dissipated that guano and chemical manures could preserve the land in continual fertility : they have proved stimulating rather than strengthening, and the loss of productive power is bitterly lamented in Central Europe (*Oesterreichische Monatschrift für Gesellschafts-Wissenschaft*, Juni, 1882, pp. 297-8) and suspected even in England (*The Times*, March 15, 1883) ; nor is it unlikely that much of Europe, England included, will soon have in self-preservation to find a plan of restoring to the country all the sewage and refuse of the town (*cf. inf.* § 183^a, on the technical methods of dealing with sewage). It is highly dubious, moreover, whether the exhaustive agriculture so recklessly carried on in so much of America can be economically justified. Still less easy to defend is the treatment of their land by the emancipated Russian peasants. And there is no doubt of the disastrous results of the exhaustion of the soil in portions of India and in Ireland. On the fact in India I shall have occasion to speak later (*inf.* § 304) ; on Ireland I will give a passage from Mr. Cliffe Leslie. He says, speaking of Ireland (*Land Systems and Industrial Economy*, 1870, pp. 80-81) : "Substitute the land system for 'slavery' and tenants at will for 'slaves' in the following passage, in which Mr. Cairnes a few years ago described 'the kind of economic success which slavery had achieved in the Southern States of America,' and the passage will read as true as before. 'It consists in the rapid extraction from the soil of the most easily obtained portion of its wealth, by a process which exhausts the soil, and consigns to waste all the other resources of the country where it is practised. By proscribing manufactures and commerce and confining agriculture

within narrow bounds, by rendering impossible the rise of a free peasantry, by checking the growth of population, in a word, by blasting every germ from which national well-being may spring; at this cost, with the further condition of encroaching through a reckless system of culture on the stores destined by Providence for future generations, slavery may undoubtedly for a time be made conducive to the interests of the man who keeps slaves.' Mr. Caird fell naturally almost into Mr. Cairnes' first words when he said of the results of the Irish land system: "What the ground will yield from year to year at the least cost of time, labour, and money, is taken from it." Thus exhaustive agriculture (*Raubbau*) is no remote possibility, but in many countries a present evil.

§ 83. The second injury to the world is the diminution of its stock of minerals. Though the physical loss in one place cannot in this case be ever compensated by the gain of another, yet hitherto, I suppose, if the world be taken as a whole, the exhaustion of given mineral stores has been more than compensated economically by the discovery of fresh ones, and by the increase of technical skill enabling us to reach mineral veins and beds which otherwise would have been of no avail. Still, the potential wealth (*sup.* § 49) of the world has in this department been lessened; and for given nations the exhaustion of their mines may be as I have noticed (§ 65) a serious anxiety, and in particular of the coal beds, the foundation of modern industry, and yet evidently, as far as profitable working is concerned, in countries like England, Belgium and France, incapable, at least at the present rate of consumption, of lasting to any very remote time.* And the rapid exhaustion one after another of the petroleum districts of Pennsylvania, shews that this great present source of American wealth is likely at no very remote time to be dried up. (See an account of the oil wells given in *The Times*, 23rd Aug. 1882.)

* Mr. Jevons sounded a serious warning, in his work *The Coal Question*, 2nd ed. 1866, especially in ch. xii. But he seems to exaggerate the importance of coal, so that the book is on the whole, I think, more misleading than instructive; nor do I think he makes out his case (ch. viii.) that there is no substitute for coal to be expected, and that progress will only increase its supremacy.

The extermination or diminution of useful animals or plants is a third head of injury. I will take illustrations from Mr. G. P. Marsh's interesting work, *The Earth as Modified by Human Action*, London, 1874 *). Silphium, the famous medicinal plant of Lybia and Persia, seems to have died out, and the vegetable which produced the balm of Gilead has not been found in modern times, though a careful exploration has been made of the places where it used to grow (p. 77). Between the years 1741 and 1768, the marine animal known as Steller's sea-cow (*Rhytina Stelleri*) was extirpated by the energy or greed of commerce (pp. 105, 106). The extirpation of beavers was feared, till it was averted or postponed by the fortunate invention of the silk hat by a Parisian manufacturer (p. 92). The seal, the walrus and the sea-otter are actually in danger of extirpation (p. 106), and many instances can be given of the recklessness and destructiveness of man towards fish (pp. 107 *seq.*). A mischievous popular error has magnified the injury done to the grain crops by birds,† and by destroying the birds men have destroyed their protectors against the terrible insect world. "The general tendency of man's encroachments upon spontaneous nature has been to increase insect life at the expense of vegetation and of the smaller quadrupeds and birds" (p. 134).

A fourth evil, the converse of the last, is the spread of mischievous animals and plants by man. For example, the American river weed *Anacharis adsinistrum* has become a serious hindrance in the English rivers (Marsh, *l. c.* p. 72); the teredo has been carried to almost every part of the globe by the very ships which it gradually eats away (*l. c.* p. 137).

* It is a pity Mr. Marsh ever and anon digresses from the subjects he knows and treats so well, and speaks of matters as to which he is plainly in the dark, namely, the Roman Empire, the 'feudal system,' and the Catholic Church. In one lengthy note, near the beginning, he piles up a repulsive heap of stale and stupid calumnies. Like so many others, he has yet to learn that history requires at least as serious a study as physical science.

† Really some birds feed almost exclusively on insects, and others, though they do attack the grain, more than compensate by the number of insects which they also devour (*l. c.* pp. 15 *seq.*). Mr. Marsh notices (p. 133) the injury to forests through the destruction of birds; and how (p. 139) woodpeckers do not injure the trees, which they only bore in order to extract the worms and the like, already there.

With the barbarian invasion came the invasion of the black rat (*Mus rattus*), hitherto absent from Europe, and spreading the use of the domestic cat as a protection against it. Since the first third of the eighteenth century Europe has suffered the worse invasion of the brown rat (*Mus decumanus*), which, then first making its appearance on the lower Volga, has since spread westward, has taken possession of London and Paris, has been carried across the Atlantic, and everywhere eliminates its less prolific rival. (Hehn, *Kulturpflanzen und Haustierte*, pp. 344, 345.)* In Australia the introduction of the rabbit, useful enough in some places, has ruined thousands of acres of pasture land.† Only since the destruction of the forests of Asia Minor and Cyrene have those regions suffered in the present terrible degree from the locusts, which now breed unmolested in the open, sunny, birdless plains. (Marsh, *l. c.* p. 298.)

§ 84. There yet remain to be noticed two more injuries resulting to the world from man's action upon it, and which seem graver than any of the foregoing. The one may perhaps be called the upset of the hill-side equilibrium, the other the upset of the coast equilibrium. The first is the result of removing from the hills and mountains their clothing of forest; and much of Mr. Marsh's aforecited work is taken up with the melancholy description of how in this way man has changed millions of square miles in the fairest regions of the Old World into desert. "When the forest is gone, the great reservoir of moisture stored up in its vegetable mould is evaporated, and returns only in deluges of rain to wash away the parched dust into which that mould has been converted. The well-wooded and humid hills are turned to ridges of dry rock, which encumbers the low grounds and chokes the watercourses with its débris, and—except in countries favoured with an equable distribution of rain through the seasons, and a moderate and regular incli-

* The brown rat has nine young three times a year. It has been carried by man, as well as the black rat previously, into Ceylon. See *Ceylon*, by an officer late of the Ceylon Rifles, ii. p. 117.

† In the Mallee country, in Victoria, rabbits now so swarm that neither sheep nor cattle can live there. See the Melbourne correspondent of *The Times*, June 11, 1881.

nation of surface—the whole earth, unless rescued by human art from the physical degradation to which it tends, becomes an assemblage of bald mountains, of barren, turfless hills, and of swampy and malarious plains. There are parts of Asia Minor, of Northern Africa, of Greece, and even of Alpine Europe, where the operation of causes set in action by man has brought the face of the earth to a desolation almost as complete as that of the moon; and though within the brief space of time which we call ‘the historical period,’ they are known to have been covered with luxuriant woods, verdant pastures and fertile meadows, they are now too far deteriorated to be reclaimable by man” (p. 43. Cf. pp. 3–5).*

The equilibrium of the coast has also been upset by human agency. Mr. Marsh thinks that in the regions now occupied by Dutch, Frisians, and Low Germans the parts not exposed to inundation were once overgrown with dense woods; that “the lowlands between these forests and the sea-coasts were marshes, covered and partly solidified by a thick matting of peat plants, and shrubs interspersed with trees; and that even the sand-dunes of the shore were protected by a vegetable growth, which, in a great measure, prevented the drifting and translocation of them.” But the equilibrium of natural agencies, which allowed only gradual changes in the river-banks and sea-coasts, was disturbed in the following way:—“The destruction of forests around the sources and along the valleys of the rivers by man gave them a more torrential character. The felling of the trees, and the extirpation of the shrubbery upon the fens by domestic cattle, deprived the surface of its cohesion and consistence, and the cutting of peat for fuel opened cavities in it, which, filling at once with water, rapidly extended themselves by abrasion of their borders, and finally enlarged to pools, lakes, and gulfs, like the lake of Haarlem and the northern parts of the Zuyderzee. The cutting of the wood

* South Africa can be added to the melancholy list of devastated regions. According to the Colonial Botanist’s report, millions of acres there have been made desert, and more are being made desert annually through the destruction of the indigenous forest. Although the axe has helped, the main destructive agent has been fire. See a paper by the Rev. J. C. Brown in *Ocean Highways*, November, 1872.

and the depasturing of the grasses upon the sand-dunes converted them from solid bulwarks against the ocean to loose accumulations of dust, which every sea breeze drove further landward, burying, perhaps, fertile soil and choking up water-courses on one side, and exposing the coast to erosion by the sea upon the other" (*l. c.* pp. 424, 425). Along the west coast of France the sand-dunes advancing inland have buried fields, forests, and villages, have scattered sterilizing sand far and wide, and have formed pestilential swamps (*l. c.* pp. 588, 589). In Prussia the drifting of the sand is scarce a century old. Frederick William I. being in need of funds, allowed the pine forest on the Frische Nehrung to be felled; he got 200,000 thalers; but the state would now willingly give millions to undo the work (*l. c.* pp. 579, 590, 591).

It may be noticed that many of the grandest works of reclamation, the greatest triumphs of engineering skill, are but the undoing of our own handiwork. Thus, for example, the various measures to subdue torrents and prevent inundations in Southern France since 1865, the dykes of Holland, the draining the lake of Haarlem, the draining partly, and partly elevating by a deposit of sediment the Tuscan Maremma and the Val di Chiana, the preservation and binding of sand-dunes, and reclamation of sand wastes along the low shores of North Central Europe and Western France (all described by Mr. Marsh), are works of restoration; and we are but undoing the mischief we have wrought on the flat and the hillside.

§ 85. Sobered by the series of gloomy facts we have just considered, we are in a better state to judge wisely of what is to be hoped from the future course of invention and improvement. Many years ago Babbage (*Economy of Machinery and Manuf.* § 465) suggested the utilization of the gigantic power which daily raises the tides, and of the heat in volcanic regions. Mr. Marsh (*l. c.* pp. 633-635) notices the possible action of man on the weather, and the more immediate and practical suggestions of Duponchel (in 1868), to cause earth to be deposited over barren land by artificial torrents, a process applicable, it is calculated, to some thirty million acres in France alone. Schäffle (*Nationalökonomie*,

p. 123, 3rd ed.) marks the possible utilization of solar heat,* and how there may be discoveries in this field by which we should have more wood for other purposes, not wanting it for fuel, and should be saved having to get coal with ever-increasing difficulty, and, lastly, should be no longer obliged to carry on manufactures only where firewood, or water power, or coal beds are at hand. And I think there are actual signs that the dominion of coal is likely to be overthrown, and heat to be mostly drawn directly from the sun, and motive power to be furnished by electricity. The notion that the progress of chemical science will do very much for the supply of mankind with food, and, in particular, will be able to get means of nourishment without the help of living force, is rejected by Schäffle (*l. c.* pp. 119, 120). To me it seems that science in search of food should have a tree depicted on one side of its banner and on the other a fragment of seaweed. Not to speak of the possible use of the wood, the bark and the leaves for nourishment, there is the hope of new acclimatizations of fruit trees, as in England of some tree that would be to us what the chestnut is to Corsica; and I do not think we can say that there is any region of the earth (not arctic or antarctic) which may not be reclaimable by some kind of tree, and made fit for habitation and agriculture, when we see what the maritime pine has done in Gascony and Belgium, and what the varnish tree (*ailanthus*) is beginning to do in the South of Russia (*see* Marsh, *l. c.* pp. 607, 608), and the eucalyptus in the Roman campagna. On the possible utilization of the vegetable treasures of the sea I have already spoken (*sup.* § 64); and their immense quantity gives great importance to any invention in this field.

I have said enough, I think, to explain what sort of expectations are both weighty and well-founded. A multitude

* This is also noticed by Marsh (*l. c.* p. 46, note), who, moreover, speculates (pp. 45, 46) on the suggestion "to gather, and bind, and make subservient to our control, the power which a West Indian hurricane exerts through a small area in one continuous blast, or the momentum expended by the waves, in a tempestuous winter, upon the breakwater at Cherbourg . . . or the pressure of a square mile of sea-water at the depth of 5,000 fathoms, or a moment of the might of an earthquake or a volcano."

of minor possibilities, as the further utilization of many kinds of refuse,* can be passed over; and I need only add as the conclusion of our speculations, that although much may be hoped from the progress of physical science, yet each art can only change once from the empirical to the scientific stage, and that for many arts this change is over.†

* Babbage, *Econ. of Machin. and Manuf.*, addition to § 9, gives the details (somewhat unsavoury) of how all parts of the horses slaughtered at Montfaucon, near Paris, are turned to account.

† Mr. Jevons, *The Coal Question*, pp. 138–140 (2nd edit.), cites and justly rebukes Lardner's idle optimism as to scientific invention.

CHAPTER III.

MAN AS A FACTOR OF PRODUCTION.

Seven Points of Anthropology, § 86, 87—Variation of Races in regard to Multiplication, § 88—In regard to Capacity and Willingness for Work, § 89, 90—Distinction of Age, § 91—Distinction of Sex, § 92—Training (Technical and General Education, § 93, 94—Limitations to Productive Capacities, § 95—Concerted Labour (Co-operation), § 96—Advantages of it, § 97—Limitations and Drawbacks to the Division of Labour, § 98–101—Effects of Discord (especially of War) upon Production, § 102, 103—Effects of Carelessness, Dishonesty, Discontent, § 104.

§ 86. Of the two factors or requisites of production (*sup.* § 61) the one, namely, the external world, has been considered in the preceding chapter; the other, namely, man, has to be considered in the present chapter, which therefore has for its object the productive capacities of human individuals and races, and the variations, limitations, improvements, and injuries to which these capacities are subject.

A portion of the way lies over the thorny ground of anthropology, on which I tread with the greatest diffidence, and over which I shall hasten as quickly as possible, indicating rather than entering the various fields of discussion. Even so I fear lest I deviate from the middle path that here if anywhere is needful, that golden mean between disregarding the diversity of the race and surroundings, the age and the sex of the 'labourer' or 'producer,' and on the other hand exaggerating these diversities; between laying too little stress on the race and its life, too much on individual development, and the converse error; between imagining an equality of capacity among races and classes as though there was no hereditary transmission of qualities, and on the other hand imagining a permanent inability of certain races to improve much or at all their mental and bodily powers, to

adapt themselves to new conditions, or even to continue their existence.*

Let us endeavour to avoid such excesses, and let the following seven points of anthropological doctrine be sufficient for our guidance.

§ 87. First, man forms a kingdom by himself, distinct from the animal kingdom as much as this is distinct from the vegetable kingdom, and the vegetable from the mineral kingdom, each higher one possessing its own special characteristic in addition to those of the kingdoms below. Thus the plants possess vegetative life, the animals possess sensitive life in addition to vegetative, man possesses intellectual life in addition to sensitive and vegetative. And thus we can only say in a certain sense that man is an animal, just as we can only say in a certain sense that an animal is a vegetable.

Secondly, if with de Quatrefages (*The Human Species*, London, 1879, p. 36) we take *species* to mean "a collection of individuals more or less resembling each other, which may be regarded as having descended from a single primitive pair by an uninterrupted and natural succession of families," we can say that man forms a single species, and (as a corollary) that the union of any male and female of this species, although they be as unlike as the blackest negro and fairest white, can result in an offspring capable, not merely of individual vigorous existence, but also of propagating itself indefinitely.

Thirdly, if we take *race* to mean "a number of individuals resembling each other, belonging to one species, having received and transmitting, by means of sexual generation, the characters of a primitive variety" (*l.c.* p. 39): we can say that man is divided into a number of races. The diversity of race is due to two heads of causes, of which the one comprising those external circumstances, as climate, food,

* An interesting comparison can be drawn between man and animals in regard to their capacities for supporting the life of the individual and the race. But I omit it as not being essential to the present discussion, only observing that in this matter, as in others, the mean must be kept between making too much or too little of the psychical faculties of animals, as though they possessed rudimentary reason, or as though they did not possess sensitive apprehension and sensitive appetite.

and habitual occupations, which affect body and mind, can be called *the surroundings* (environment, *milieu*) ; the other, namely, the physiological transmission of qualities from parents to children, can be called *heredity*.

Fourthly, the working of these two causes may result in very different effects according to circumstances. For if the surroundings keep the same, and the race keeps unmixed with others, there is likelihood that its qualities will also keep the same ; and thus the negroes, at least some of them, and in regard to their external appearance, have kept unchanged for several thousand years ; whereas if the surroundings change, the qualities of the race are likely to change ; and thus the tall, loose-limbed, fair-haired, blue-eyed Gaul has changed into the short, compact, and swarthy Frenchman ; and the English and negro race transplanted to America have already undergone a metamorphosis. Where, moreover, a race is crossed with another, the force of heredity is, so to speak, divided against itself, and the likely qualities of the half-bred offspring are most difficult to be conjectured.

Fifthly, the distinction of race may be reproduced in a milder degree between different *classes* in a given race and different localities in a given country. The food, clothing, and occupations of an upper class may be so different from that of a lower class, that although other of the surroundings, as climate, are the same for both, the two classes may come to form two types widely different. And heredity will perpetuate the difference unless some change occur in the surroundings or some intermixture of the classes.

Sixthly, the evidence *à posteriori* seems to shew that any race or class is capable of modification, not indeed in an instant, but if sufficient time is allowed ; nor anyhow, but if the modifying influence is applied to a sufficient number of individuals ; nor indefinitely, but as far as any known modification of the human mind or body has actually extended. That is, there is the physiological possibility of as great changes in the colour and form, in the physical strength and mental capacity of any race in the future as have actually happened to it in the past ; only this does not imply that of such changes there is any historical probability.

Lastly, every individual, though of a tribe or class the lowest in intelligence and technical aptitudes, is capable of attaining to the end of man's existence and of living a good life in society. There is no such thing as 'the irreclaimable savage'; and although in Economics the qualities of a given race at a given time (the result of the surroundings and heredity) must be remembered if we would judge rightly of its social institutions, it is never fatally doomed to degradation, decay, or extinction; and if these evils befall it, they are the result of preventable causes, not of physiological necessity.*

§ 88. Passing by the variations among races and classes in matters that do not immediately concern us, such as hereditary capacity for political government, or hereditary attraction to certain foods or certain amusements, let us look at variations in matters relating to man as an agent of production. And let us begin with what affects the number of producers.

The causes which can influence the multiplication of the human species are so numerous and complicated, and many so difficult of detection, that all statements as to one race being more fertile than another must be received with the greatest caution; and when we think that, till quite recently, any accurate statistics of births and deaths have been rarely obtainable, we may well doubt there being much ground for positive conclusions. If a given race is not particularly afflicted with illness, nor habitually eats or works too much

* The art of extermination is a very old one; but to say the victim is physiologically incapable of further prolonged existence, seems a modern refinement. It might be well were it a part of every one's education to learn in brief the history of the barbarous, sometimes fiendish, atrocities, of which during 350 years the Europæan races have been guilty towards the natives of America, North and South, of Africa, of Australia, New Zealand and Polynesia, atrocities in which, sad to say, the English race has been second to none, and which have been perhaps worse than ever in the last fifty years. Some citations and references on this humiliating matter are given by Waitz, *Anthropology*, edit. by Collingwood, 1863, pp. 149-152, 165-167, 314, 315; de Quatrefages, *The Human Species*, 1879, pp. 461-466; Rauch, *Die Einheit des Menschengeschlechtes*, 1873, pp. 257, 258, 261-266; Marx, *Das Kapital*, pp. 783-785 (only Marx must as usual be read with caution); John Wisker, in the *Fortnightly Review*, June, 1882, pp. 711-734; Henry George, *Progress and Poverty*, 4th edit. pp. 449-451.

- or too little, nor is given to immorality, and if the usual date of marriage is not premature or tardy, nor the period of suckling unduly prolonged, I doubt if it can be shewn to be more or less fruitful than any other race under the same circumstances,* and I feel sure it cannot be shewn to be incapable of continuing its existence. And what I have said of race can be said of climate.

The death-rate of different races, classes, and countries varies as much as their birth-rate ; but this is no indication that the blood inherited or the climate dwelt in is the cause of the diversity ; for with certain exceptions it can be accounted for by the different habits of life. In fact, an extremely great variation is often seen in the mortality of different groups of persons in the same climate and belonging to the same race and class ; and medical science can point out known and adequate causes of a high death-rate, such as unhealthy trades, ill-drained and crowded dwellings, excess in drink, unhealthy amusements, and especially careless or ignorant treatment of infants. But to the general truth, that race and climate make no difference to health, there seem three exceptions. First, certain tracts of country are really unhealthy even to those who live around them. Thus the Campagna of Rome is bad for Italians, not merely for Englishmen ; and the estuary of the Gaboon is fatal not merely to whites but also to negroes. Much more important is the second exception which occurs during a process of acclimatization. If a race or a portion of it is suddenly shifted to another climate it may, and if the climate is very different probably will, suffer much more from certain

* If, indeed, the facts cited from Ramon de la Sagra by Rauch, *Die Einheit des Menschengeschlechtes*, Augsburg, 1873, p. 226, and from Macaulay by Waitz, *Anthropology*, edit. by Collingwood, London, 1863, p. 41, regarding the great fertility of, severally, the white race in Cuba and the negro race in Haiti, are trustworthy, cases of special fecundity seem to be made out. Facts like those edited by de Quatrefages, *The Human Species*, p. 87, on mixed unions in some places giving a higher average of births than those between two of the same race, do not shew diversity in fertility unless it can be shewn that there is no diversity in any of the various points (as age of marriage or length of suckling) which I have mentioned in the text. Variations in the average age of puberty, due partly to race and partly to surroundings, seem better established. (See de Quatrefages, pp. 415-418 ; Waitz, pp. 39, 40, 109, 110.)

diseases than the natives ; and it may have to pass through many years and several generations before it is adapted to the new climate, and regains the normal healthiness of man. Till the acclimatization is complete, the stranger race will be less healthy than the native, although the habits of the two be equally healthy. And of several immigrant races, that one will probably for a long time exceed the other in healthiness which has come from a climate the most alike to the new country. So the Europeans suffer from marsh fever in Africa, the negroes from phthisis in Europe ; while the yellow fever in America is the scourge not of black but of the white immigrants (Waitz, *l. c.* pp. 124-127 ; de Quatrefages, *l. c.* ch. xxxii.). The third exception is in a way the converse of the second. Instead of natives being more healthy than immigrants because these are unaccustomed to the climate, they may be less healthy, as being themselves unaccustomed to and therefore unable to resist some new disease which the immigrants bring with them. Terrible, for example, were the ravages of the small-pox introduced by Europeans among the American Indians, and of syphilis in Europe when it first came from America ; and quite recently we have witnessed the ravages of measles in Fiji, and of phthisis among the Polynesians in general. And it may happen that a population may be destroyed before it has had time to get accustomed to a new climate or to a new disease, and to rear a generation in which the normal mortality is regained.

The duration of life cannot, I think, be shewn to depend at all on race or climate. We cannot say that any race as such is specially long-lived, any climate as such specially favourable to longevity. (Waitz, *l. c.* pp. 122-124 ; de Quatrefages, *l. c.* pp. 418-421.)

§ 89. In the capacity for labour much diversity has been observed ; but whether, or how far, this can be attributed to climate or race is difficult to tell. Of course in a locality which is absolutely unhealthy, as ague-breeding marsh land, or among a group of individuals who have not yet been acclimatized, as Europeans in the tropics, the capacity for labour is less than in a healthy locality, or among those to whom the new climate is much the same as the old, as the West Indies to the negroes. But besides these differences

due to absolute or relative unhealthiness, there are others not so easily explainable. In muscular strength, in power of endurance, in swiftness, in keenness of the senses, there are differences in different races and localities. (*Cf.* Waitz, *l. c.* pp. 114-122, 137-143.) But since there are also great differences in these physical endowments in the same locality and same race, and even in the same family, since also the habits of life can cause so much of the difference, and since statistical observation is so wanting in this department, I will leave it.

As regards skill and vigour in working, and willingness to work, many writers assert a great diversity between different races. Mr. Brassey (*Work and Wages*, 1873, pp. 101, 102), cites the Factory Report that, owing to the greater vigour and steadiness of English workmen, the number of spindles which a single person can manage is far greater in England than on the Continent; he notices that as practical mechanics the English are unsurpassed, witness the high-paid English engineers in the steamers of the Mediterranean (pp. 113, 114); that in exhausting and laborious mining the English miner surpasses the foreign all over the world (p. 115); that in the practical application of inventions, in general administrative capacity, and especially in the art of economical management, English manufacturers have shewn a real commercial genius rarely shewn abroad (p. 122). Mill (*Principles of Polit. Econ.* Bk. I. ch. vii. § 5) notices how the Italian workmen are able, the English unable, to adapt themselves to new circumstances. Mr. Hearn (*Plutology*, ch. ii.) says that two English labourers or artisans are equal, it has been found, to three Scandinavians or Germans; and that the French and Italians are unequalled in those arts which require delicacy of touch and refinement of taste. And he notices, from Laing, the want of energy among the Dutch and German tradesmen, and among the Neapolitans in general. Mr. H. C. Barkley gives as his experience that the Bulgarians and Tartars are excellent workmen as well as the Albanian Christian masons; that the Turks are obliging and good on an emergency, but are unable to stick long to one thing, and need most careful supervision; that the Greeks, except Greek boatmen, are generally bad for hard steady work, while the Armenians cheat from the

highest to the lowest. (*Between the Danube and Black Sea*, pp. 156, 157, 175-177; *Bulgaria before the War*, pp. 192, 284-288). The Singhalese are an idle race according to Mr. Capper (*Old Ceylon*, p. 193), requiring constant inspection by an European manager. And who has not heard of the intolerable laziness of the negroes in Jamaica, and of the Neapolitan fishermen sleeping in the sun?

§ 90. Many pages might be filled with statements of which the foregoing are specimens.* The question is how to value such statements. Some are plainly in contradiction with others. Some are stupid calumnies, as when the Neapolitans, who have been working hard all night, are thought lazy by ignorant travellers who see them sleeping by day. (See W. J. A. Stamer, *Dolce Napoli*, pp. 6, 7, 26, 79.) Some are rash generalizations, as when the qualities, good or bad, shewn by some few of a given race in some particular employment are made to apply to the entire race or to all employments. Still, although most cannot stand the test of rational criticism, some differences in national ability and willingness to work are admissible. That there are lazy races, I confess I do not believe; but I think it can be shewn that some races are much better fitted to *work for a master* than others. The Phrygians and Lydians were found much more docile slaves by the Greeks than were the Macedonians and Northern nations. In parts of Spanish America the native Indians were supplanted by negroes, although physically their equals; they seemed, that is some of them, under certain conditions, to be unfit for service, to sink into melancholy, and to perish rather by psychical than by physical causes (Waitz, *Anthropology*, pp. 118-120). Further, I should not like to deny that the Chinese excel in imitation

* If it is a question not of mere industrial capacity, but of national character in general, the number of statements that could be collected would be very much increased. Some of these, and many references are given by Cornewall Lewis, *Methods of Observation and Reasoning in Politics*, ch. xvi. § 5; but he does not sufficiently explain their delusiveness. Cf. the careful statements of Ulrici, *Gott und der Mensch*, 1866, pp. 426-429, who, after noticing the difficulty for a native, still more for a foreigner, to acquire a correct idea of national character, ends by saying, that "a 'psychology of nations' (*Völkerpsychologie*) will therefore for long, perhaps for ever, have to contend with unsurmountable difficulties."

and obedience to direction, and that among modern Englishmen hereditary capacity for industrial management and command is more common than among other Europeans. And I think it can be proved that the Jews as a race are endowed with singular talent for business, and particularly for gambling and usury, so that the other races of Central Europe, Teutons and Slavonians, Hungarians and Roumanians alike, are seen writhing in their toils.* A very different, but as indisputable a superiority is that of some races, or rather of certain groups of men among them, in capacity for artistic handicraft, witness the pottery and woven fabrics, the jewellery and lacquer ware of India and China.

§ 91. The productive capacity of man varies greatly, as is evident, with his *age*; and several questions are connected with this variation. As a rule, I suppose, the working power is greatest at the age when the bodily organism is at its perfection; but not always. Of course, much is given to children and to old people to do, not because those in the prime of life would not do it better or quicker, but because they can do something else in which their superiority is still more conspicuous. Some employments, however, are not merely relatively but absolutely fitter for the young or the old than for the age between, which could not do the work so well. The man of thirty has not got, as a rule, the mental habits of wisdom and experience needed for certain industrial posts; and he has lost the bodily habits fitted for certain other employments. Thus their lightness and nimbleness make boys specially fit to work on board ship, or for employments like that of climbing the smooth-stemmed, lofty, branchless cocoanut trees to pick the fruit. (Capper, *Old Ceylon*, pp. 188 *seq.*). In Cuttack, the silver filigrane work, so skillful and delicate, "is generally done by boys, whose sensitive fingers and keen sight enable them to put the fine silver threads together with the necessary rapidity and accuracy." (G. C. M. Birdwood, *Handbook to British Indian Section*, 1878, p. 71.) And the delicacy of children's fingers gives them the advantage over adults, or

* Schäffle, *Nationalökonomie*, ed. 3, 1873, I. p. 152, gave his countrymen a warning upon the Jews at a time when such warnings were less common, and thus more needed, than now.

at least male adults, in pointing needles, and in many processes of the silk manufacture. Another point is the measurement of variations in capacity; for example, the average number of days in which illness stops work, an interruption far more frequent in declining years. Again, it may be noticed that the productive power of a given country will vary, other things being the same, according as a smaller or greater proportion of its inhabitants belong to the age most capable of labour. And analogous to the physiological fact that abnormal individual development is unfavourable to the continuance of the species, it can happen that a nation can have for the moment great industrial capacity because by its low birth-rate the proportion of infants who cannot work is small. So the recovery of France after the war of 1870-71 was in part due to its feeble birth-rate. With a birth-rate equal to the Prussian it would have had some half million more helpless infants to support, and would have found the task of paying for the war far harder. But such abnormal industrial power of a single generation is only got at the cost of the future power of the race.

The questions, not of physical capacity but of economical fitness, at what age work should be begun and left off, and what work; and the fit relations of the different ages in the workshop and the household—must be considered later on.

§ 92. In like manner we have not now to consider the ethical aspect of the difference of *sex* in industry, but only the physical and psychical aspect, that is, not what is right, but what are the special industrial aptitudes of each sex, which we ought to know if we are to judge what is right. There is indeed considerable danger of confusing the two questions. Those eager for the so-called emancipation of women are likely to minimize the physiological differences of the sexes, and their extreme opponents to exaggerate them. Similarly, those who have paid most attention to the bodily and mental resemblances of men and women are likely to think there ought not to be much difference in their several employments; and just the reverse where most attention has been given to the differences between the sexes. Nor will the actual employments of the two sexes in the past and present give us any easy test of their several capacities.

For the practice of different places and times has shewn great variation, and even were it uniform we should still have to find out whether any given rule were due to moral rather than to physical reasons. Thus the fact that women in England do not work underground in mines is no proof of their being physically unfit for such employment; for the moral evils of their so working are a sufficient reason for its being forbidden, as it is, by law. On the other hand their having been employed underground before the law forbidding it is no proof of their physical fitness for it; for the mine owners may have employed them in spite of their inferiority to men, because they could be got to work for much lower wages. And what are we to conclude when we see that dairy work, which in England is especially done by women, is precisely that part of the farm work which they do not do in the Pyrenees? Still, although mere statistics of the employments of the sexes are as likely to mislead as to enlighten us, they can give us help when rightly used in connection with other observations.* Thus physiology tells us that women are inferior in muscular power to men, and this accounts for the absence of female blacksmiths, railway porters, iron-puddlers; and we can say it is unfit for the Welsh girls to help in unloading coal or breaking limestone (Bevan, *Industrial Classes*, i. p. 41), or for the Kabyle women in Algeria to carry water from the deep ravines to the top of the hills (Lady Herbert, *Algeria in 1871*, p. 146). Again, the nervous temperament of women might be expected to exclude them from employments where coolness and presence

* According to the Census Returns of 1861 (which date is as good as a more recent one for the mere purpose of illustration), in the United Kingdom men were exclusively employed in the army, navy, police, building trades, mining, fishing, shipbuilding, as seamen, sawyers and coopers, quarriers, railway servants, and in some minor trades. Hardly any women were employed as iron, hardware, or machine-makers, as brewers or carriers. Women were numerous or even equal in number to men in the woollen trade, bookbinding, paper-making, and boot-making. Women were more numerous than men in the textile industries as a whole (in particular in cotton, linen, silk, hosiery, and lace), in straw-plait making, in making garments, and as domestics. The proportion of women to men was roughly three to two in the textile industries, four to one in the wearing apparel trades, and seven to one among domestic servants.

of mind were in frequent requisition ; and in fact we find them excluded from sea-fishing and navigation. On the other hand their greater delicacy of touch gives them an advantage in certain operations which we might expect to see displayed in statistics. Thus the Census Returns of 1871 gives the number of boot and shoe makers for England as 197,465 males and 25,900 females ; of shirt-makers, no males and 80,038 females. A great deal of this difference must be due to physical not moral considerations ; as also the fact that the two sexes are about equal in number in the woollen and worsted trades, whereas in the silk trade there are double as many females as males. In a report upon the cotton industry at Roanne, given in *L'Association Catholique*, tom. ix. pp. 341 *seq.*, it is said : "What is wanted in a weaver is attention, so as to stop the machine the moment a thread **breaks**, and adroitness, so as to connect again well and quickly the broken threads. It can be imagined how for an employment needing especially these two qualifications women are wonderfully suitable." Leaving others to discuss the further differences of the sexes, I will but name the greatest of all the superiorities of women, their capacity for nursing the sick and for attending young children.* Finally, let us not forget that the decision on what is the fit employment for women, what is always and what never their province, and, again, what may or may not be, according to circumstances, rests with ethical not physical science.

§ 93. The natural inequalities in productive capacity, due to sex or race or individual qualities, can be lessened or increased by training, as is evident. "The senses," says Mr. Hearn (*Plutology*, ch. iii. § 3), "become by constant exercise acute to an almost incredible degree. Astronomical observers can estimate differences of time to the tenth part of a second, and differences of space to the five-thousandth part of an inch. Operators in the electric telegraph recognize the peculiar voices of their several wires. A skilful artisan will

* Some of the natural differences of man and woman are set forth with great simplicity and beauty in the seventh chapter of Xenophon's *Oeconomicus*. The strong as well as the weak points of woman's character are examined with much acuteness by Ulrici, *Gott und der Mensch*, 1866, pp. 412-419.

in a few minutes complete a work which would be entirely beyond the powers of a person unacquainted with that art. A professional man every day, almost without conscious effort, disposes of matters which, to an unprofessional person seem hopelessly perplexed." And the very perfection of skill is likely (he observes) to make us forget the time, the labour and the many failures by which the facility of action has been attained.

Although in a certain sense all training having improvement in any art as its end can be called technical education, whether theoretical or practical, whether in the school or the workshop, whether imparted by another or acquired by oneself, yet the term is generally confined to industrial training, and here to such industrial arts as require some person to teach them and some time to learn them. In the following book we shall have to consider the grave question of the fit relations between teachers and pupils, and the morality and happiness of apprentices. Here we have only to consider technical capacity, and to gain a few general principles concerning it. First, for the great mass of trades and for the great mass of workpeople engaged in them, it is needful, if the work is to be good, that regular teaching be given; and only those with exceptional talents are able to be good workmen by merely, as they phrase it, picking up their trade.* Further, in some trades efficiency or endurance is only to be got by being brought up to it from youth, as the trade of the iron-puddler (Bevan, *Industrial Classes*, i. p. 45) or coal-miner, or, again, as the management of horses. Another point is the danger to life and limb by the employment of the ill-instructed. While a miner or seaman is 'picking up' his business he may be the death of himself and his fellow-workmen; and in Great Britain much of the mortality in these two departments, and perhaps in others, may be the result of the anarchical state into which technical education has fallen.† And if an artisan at last attains to efficiency,

* The denial of this was part of Adam Smith's case against apprenticeship; whereon he is well confuted by L. Brentano, *Die Arbeitergilden der Gegenwart*, ii. pp. 143-155, from whom I draw some of the remarks in the text.

† On coal mines see the evidence in the Report on Trades Unions, referred to by Brentano, *l. c.* ii. pp. 14, 124. On seamen see the Petition

he may have spent years of labour and spoilt quantities of material, which might have been saved had his trade been regularly taught him. Having recognized the need of technical education, we have next to consider the sort. On which point let it suffice to notice the two opposite errors, one imagining that because in former ages empirical training was sufficient, it is sufficient now, and that scientific training is uncalled for; the other imagining that because scientific training is necessary for some positions in the industrial ranks it is necessary for all, and that for some at least it is sufficient in itself without the addition of any empirical training. Much rather, mindful of history and of how in many arts the scientific has succeeded the empirical stage (*vid. sup.* §§ 75, 77); and mindful no less of human nature and real life, let us say, that while scientific training is needed for some, empirical training is needed for all. There remains a third question, whether scientific (theoretical) instruction should be given before or after beginning empirical (practical) instruction. Here, I think, we must distinguish trades and classes. For the bulk of those known in England as mechanics and artisans I think we can accept the experience and the words of Mr. George Howell, who says (*Contemporary Review*, Oct. 1877, pp. 856, 857): "Technical [*i.e.* scientific] education can, at its best, only be supplementary to a something that has gone before, that something being a knowledge of the practical details of the trade, which can only be obtained in the workshop . . . the youth can only be taught the special scientific principles which appertain to his craft, and their application in the workshop, after he has begun to learn his trade; and this instruction should be continued side by side with the experience gained from time to time in his daily labour. Apprenticeship [*i.e.* empirical training] in some form or other . . . is imperative in learning a trade, as nothing can supersede this; technical [scientific] education will assist

to Parliament in the summer of 1880 from the Liverpool Seamen's Protection Society, complaining of the loss of life through incompetent sailors, and advocating the restoration of compulsory apprenticeship. On the general state of our British workshops, in which it is nobody's business to teach the apprentices or 'improvers,' see Mr. Henry Solly's pamphlet on *Technical Education*, 1878, pp. 5-9.

in developing and guiding the latent skill and acquired expertness of the boy." Similarly Le Play, who also can speak from experience, would make scientific instruction not antecedent but supplementary to the practice of the workshop.* And other authorities speak with equal decision.† But in agriculture there seems a difference. The fields are the workshop, and every observant child, rich or poor, who is so fortunate as to be brought up in the country, goes through a sort of agricultural apprenticeship. Here scientific teaching might in part be given before practical employment; for the pupils would be able from the experience of their daily life to have a real, not a mere notional, apprehension of the matter taught. Thus one of the upper class might, after finishing his 'liberal' studies, go through a course of scientific agriculture before beginning to farm;‡ the children of a yeomanry might complete their education with a course on small farming; and even agricultural labourers might be taught some botany and natural history at the elementary school.§ But none of this need prevent the existence of schools or courses of husbandry open at least during the less

* Le Play, *La Réforme sociale*, ch. 47, § 20-22, 5th edit.—The French phrase 'l'enseignement professionnel' seems currently used with the same arbitrary limitation as our 'technical education,' to mean only that part of training for any art which is theoretical as opposed to practical.

† Thus Mr. Solly, the actual or former head of the London Artisans' Institute, who urges the need, after the method of that Institute, of a workshop or laboratory being annexed to every class-room for Technical Education, and of some at least of the teachers being practical workmen, does not at all wish this instruction to precede or to dispense with the experience of the real workshop, but to be given in the evening to those who have been at work during the day. He says expressly that "*no class teaching can supersede the actual workshop*, and that no technical training, outside or independent of the workshop, should ever be set up as a substitute for the training to be obtained inside it. All the witnesses examined before the Royal Commissioner on Scientific Instruction are unanimous on this point," alike scientific men and large employers. (*Technical Education*, p. 15.)

‡ Naturally a town-bred youth must first serve some sort of apprenticeship in the country, or the scientific doctrines will be mere words to him. The distinction of the town-bred and country-bred youth is noticed by Roscher, *Ackerbau*, § 172.

§ Cf. Kebbel, *The Agricultural Labourer*, ch. iv.; Roscher, *l. c.*; Schäffle, *Nationalökonomie*, § 58, p. 109.

busy times of the agricultural year, and at which could be learnt the scientific principles specially adapted to the given country and countrymen.

§ 94. Another question is how far technical training is affected by general instruction, that is how far elementary instruction among the lower ranks, and so-called liberal education among the higher, affects their capacity for learning and practising any art. Although the question is obscured by prejudice, we shall, perhaps, be able, by making the necessary distinctions, to obtain a reasonable answer. First, then, many posts in modern industry can only be filled by those who have learnt to read, write, and reckon; and, whereas, in simpler states of society, where the arts are handed down by oral tradition, where the market is fixed and small and local, where all dealings between buyer and seller are by word of mouth, a man though quite illiterate may be an excellent, successful, and independent handicraftsman; in a complicated state of society where there are industrial text-books and wholesale and competitive trade needing elaborate book-keeping, correspondence by letters, and constant advertising, no man who lacks elementary general instruction can be at the head of a business, and even in the inferior posts the illiterate are likely to be at a constant disadvantage. Less obvious, but perhaps no less true, is the advantage which a liberal education gives in the subsequent acquisition of technical knowledge. Some evidence on this matter is given by Dr. Hillebrand (*Contemporary Review*, Aug. 1880), who maintains that "the smattering of mercantile knowledge, such as book-keeping and commercial letter-writing, which is painfully acquired by long years of work at school, may be mastered in a few weeks by any man of liberal education" (p. 206)*. And perhaps it

* After shewing the excellence of the classical languages as means of intellectual training, he says (*l. c.* p. 210, note): "According to this system [the 'bifurcation' in France] both sets of pupils were educated together up to the fourth class, and it was only on their entering the third that they were divided into *littéraires* and *scientifiques*. The final examination of the latter was the *baccalauréat ès sciences*, that of the former *ès lettres*. . . . I was a permanent member of the examining commission, and so had hundreds of opportunities of convincing myself of the inferiority of the *bachelier ès sciences* in all those subjects in which the

can be also shewn that a literary education which is less than liberal but more than elementary is as advantageous to those who are to occupy an intermediate position in the industrial army, as a liberal education is to the leaders, and that it contributes to make them quick-witted, versatile, and respected by their subordinates. But let us not think that a literary education, however advantageous, is by itself in the least a sufficient training for one who is to have workpeople under his command. Much rather, if he is to fill well such a post, he must possess certain qualities which it is not in the power of literary education to give him. These qualities, as Xenophon, in his simple and graceful way, has long ago explained (*Oeconomicus*, ch. 15 and 21), are first to be careful and diligent, and zealous if he too have an employer, for that employer's interests; secondly, to have a thorough technical knowledge, without which no zeal is of avail; thirdly, that capacity for command, that *τὸ ἀρχικὸν εἶναι*, without which he can expect no peace and little profit in the work. Turning to the rank and file of the working classes, we must here again be on our guard against illusions concerning the effect of general education upon their technical capacity. The question is not whether intellectual training is good for the masses, but whether it affects their physical capacities and moral dispositions for work, whether it makes them more or less able and willing. As to ability, I see no evidence decisive one way or the other, and will only notice that, because the illiterate or ill-read are unfit for higher posts, it does not in the least follow that in the lower posts they are less efficient workmen than the more instructed. And

pupils of both schools continued to share the same instruction, such as history, French literature, etc. And a similar experience may be gathered from practical life. One of the first bankers in a foreign capital lately told me, that in the course of a year he had given some thirty clerks—who had been educated expressly for commerce in commercial schools—a trial in his offices, and was not able to make use of a single one of them, while those who came from the grammar schools, although they knew nothing of business matters to begin with, soon made themselves perfect masters of them." Mr. Hearn, *Plutology*, ch. iii. § 4, says that the acknowledged quickness of the volunteers in learning their evolutions and other military duties, as compared with regular troops, has been explained by the superiority of their general education.

the example of the English miners, navvies, and factory workers in the first half of the present century shews that there can be great efficiency where there is little instruction. As to moral dispositions, I doubt if it can be shewn that willingness to work, sobriety, docility to superiors, friendliness to fellow-workmen, and other qualities favourable to productive activity, are in any necessary connection with literary instruction. School instruction may help one man to be sober and diligent by implanting in him a taste for intellectual pleasures ; it may fill another with dislike for his trade and discontent with his position, so that he seeks solace in drink, or vents his spleen by filling the workshop with insubordination or discord. And of course the main influence on moral conduct is not school teaching but moral training ; nor is it necessary to answer those fanatics who imagine that book-learning is the antidote to vice, that a population well instructed in letters and physics will live in virtue and concord, and that the reformation or preservation of morality among the masses can be the work of the schoolmaster, and not of the parents and the priesthood. For their view has neither reason nor experience to support it.*

§ 95. Man's capacities as a factor of production are limited ; he cannot be taught indefinitely or work indefinitely. And first, as to learning, after a certain point in technical education each fresh lesson gives less and less proportionate return till a point is reached beyond which no further teaching is worth while, and at last a point beyond which nothing is possible to be taught. The previous point beyond which instruction is indeed possible but not worth while, depends for its position on the quality and quantity of the work in the given art required from each individual artisan. If a man has occasion to make only the rough furniture of a cottage or a cabin, it is waste to push his instruction as a carpenter and cabinet-maker to the point which would enable him to make the furniture for a palace. If a villager owned a few sheep and had much else besides them to attend to, it would be absurd for him to spend much time in

* Le Play's refutation of the illusions on popular instruction (*La Réforme sociale*, ch. 28 and 47) might be profitably studied by many on this side of the Channel.

learning the scientific principles of rearing stock, though nothing might be more suitable to the owner or manager of many flocks and herds. Only let us not forget that requirements may be bad and social relations bad ; and thus although for the given workman or his master a given point in his proficiency is most profitable, it may be the wrong point for society in general ; moreover, the interests of master and workmen may clash. Thus in London vast multitudes buy, as the phrase is, cheap goods and nasty, when it would be much better for them to get better goods ; many are housed in houses that are not built but 'run up,' when it would be better for them to live in better houses. The reason for this is not now to the point, only the fact, and the consequence that for many workmen or their employers any considerable technical skill is not worth while : the extra price of good work will not pay among other things for the extra cost of learning. And the social relations may be such that an employer may get more out of bad workmen because more dependent than out of good workmen.* Again, there may be excess instead of defect in training. To the individual French cook or first-hand at a fashionable tailor's their several proficiencies may be indeed profitable. But in a healthy society such arts should not be too elaborate, not to speak of others in which there should be no proficiency at all.

Quantity as distinct from quality of work has also limitations. After a certain point in manual or mental labour each fresh exertion brings less proportionate return : the personal sacrifice increases rapidly in proportion to the result, till at last no more labour is possible ; and long previously it would have ceased to be worth while. Physiology and experience tell us that a body of men whose working day is from ten to twelve hours long may produce more in a year

* According to Mr. Solly, workmen say that in most 'shops' technical skill is not encouraged, employers not wanting well-educated foremen and work of high quality, but foremen who will get the most work out of the men. And the employers will reply that the alleged extra skill is an excuse for dawdling, and that the public is most to blame, looking to cheapness rather than quality. Mr. Solly himself says a scientifically trained man works quicker, works more accurately, and saves material (*Fraser's Magazine*, Feb. 1877, pp. 213, 214).

than if their working day was fourteen or fifteen hours long. More may be done in the long run (say a generation) by those who enjoy the Sunday rest than by those working seven days in the week. And perhaps it might be possible to find out for each sex and age and employment the exact number of working hours a day, and of working days a year which would give year after year the greatest return. Only let no one suppose that this amount of working time is the right one ; for production is for man, not man for production, and habitually the hours of work ought to be fewer and the days of rest far more numerous than would be assigned according to the aforesaid calculation. Else, although there would not be physical, there would be moral, overwork. Even if we dismiss the view of public welfare and consider only individual profit, the results of the calculation would only sometimes tally with what was profitable to the individual, for example, if a body of workmen were permanently attached to a given master. For in many cases, as we see daily, the immediate interest, sometimes of the employer, sometimes of the workman, sometimes of both, leads to physical overwork. But however much this excess may be to their interest, the interest of a Christian country is to put an end to it.

Another limitation to production is in the number of producers, which indeed can be artificially increased in a given society by bringing in strangers or by making those work who worked not before, but otherwise is strictly limited for a time by the previous vital statistics of the given society. For nature cannot be anticipated, and no sudden increase in the number of marriages can have any serious effect on the productive power of the society till after the lapse of some fifteen years.

Naturally the productiveness of a man's labour may be much increased by the improvements in the arts spoken of in the last chapter or by concerted action to be spoken of immediately ; but in neither case indefinitely. Nor can the limitations be undone which have been described in this section, and the importance of which as a check to indefinite accumulation of preparatory wealth (so-called growth of capital) we shall have occasion to see in a subsequent chapter.

§ 96. Let us now, still looking on man as an agent of production, consider him no longer merely in his individual capacity, but as acting in concert with others; for this is characteristic of his labour; and without some degree of concert he could hardly live. So we have to examine concerted, connected or joint labour, or, as it is often called, co-operation; and can do so briefly as others have treated of the matter at length.

A distinction has been made between simple co-operation, where several persons help each other in the same employment, and complex co-operation or division of labour, where several persons help each other in different employments. But there is great ambiguity in the term 'different employments'; and certainly the co-operation of the signalmen along a railway to enable a train to pass is more complex, although they all have the same employment, than that of the engine-driver and of the guard, although these two have different employments. It seems best to distinguish more than two degrees and kinds of co-operation. The simplest is when two men act in concert by doing precisely the same operation at the same time in the same place, as lifting a stone or pulling a rope. A higher degree of complexity is when there is any difference in the operation, as when one man rows while another steers, or one blows the furnace while another heats the iron; or, again, when there is any difference in the time, as when one sentry or relay of workmen succeeds another; or, again, when there is any difference in the locality, as when two men are repairing an electric cable at the same time but many miles apart. More complicated still is the case where the operation, the locality of the operators, and the point of time in which they do the work are all different; as when in making shirting there is concert between the American cotton planter and English cotton-spinner. And, moreover, there is a proportionate increase in the complexity of co-operation the greater number of persons act in concert (as twenty instead of two pulling a rope), and the greater variety of their employment (as marines, gunners, and engine-men on board ship, instead of only sailors), and the greater diversity of their locality (as when cotton is grown in America,

manufactured in England, and sold in India, instead of being manufactured where it is grown or sold where it is manufactured), and the more various and remote the points of time at which they work, and finally the more permanent the attachment of each to his separate function.

§ 97. The advantages of concerted labour, some more some less obvious, can be stated as follows:—(a) Increase of mechanical force, so that *e.g.* heavy weights can be lifted, large boats rowed, piles driven in, when none of these works could be done by the same number of men each working separately. (b) Simultaneous execution of different operations which are of use only if done simultaneously, as when one man dives for pearls, while several others manage the apparatus for supplying him with air and raising him to the surface. (c) Extension in space, as keeping in constant repair a road, or dyke, or conduit. (d) Compression in time, as when something has to be done quickly, as extinguishing a fire, or reaping a harvest, or making the most of a shoal of fish. (e) Extension in time, enabling a work that would suffer by interruption to be carried on uninterruptedly, as in a ship at sea. Further, as special advantages of permanent separation of employment (or division of labour): (f) Saving in the cost of learning. Had a man to learn twenty trades he would be an apprentice all his life and never a workman at all. (g) Increase in dexterity through attention to one or few things. Practice makes perfect; to work at many things is not to work well at anything; “skilful in every work no mortal man can be” (*Iliad*, 23, 670, 671). (h) Utilization of varieties of capacity. “Different parts of the same series of operations require unequal degrees of skill and bodily strength; and those who have skill enough for the most difficult, or strength enough for the hardest part of the labour, are made much more useful by being employed solely in them; the operations which everybody is capable of being left to those who are fit for no others.” (Mill, *Polit. Econ.* I. viii. § 5.) And not merely inequalities, but also varieties of capacity can be utilized, and speed, agility, muscular strength, great stature, good memory, quick intelligence, presence of mind, and other bodily or mental qualities can receive each its

appropriate employment. (*j*) Great saving of waste (maximum utilization) of labour and means of production. This saving is possible because the same act or same instrument requisite for a single useful result may be sufficient for a great number. If fifty Alpine villagers, each owning a cow, acted without concert, fifty cowherds would be needed in summer on the mountain pastures ; by division of labour one or two cowherds are sufficient. And what waste if every house in the village had the implements of the carpenter, the blacksmith, and the surgeon. Still more if every weaver in Lancashire had a cotton mill all to himself. The odds and ends (waste substances, refuse) of a multitude of separate petty workshops may be wasted, because it would be too troublesome to collect them. But if by concert the separated workshops are united, it is scarcely more troublesome to collect the plentiful refuse of the aggregation than previously to collect the scanty refuse of any single workshop ; and immensely more profitable. "The same exertions," says Senior (*Polit. Econ.* ed. 1850, p. 74), "which are necessary to send a single letter from Falmouth to New York are sufficient to forward fifty, and nearly the same exertions will forward 10,000. If every man were to effect the transmission of his own correspondence, the whole life of an eminent merchant might be passed in travelling, without his being able to deliver all the letters which the Post Office forwards for him in a single evening." (*k*) Industrial enterprises of which the reward is more or less distant, are greatly facilitated if by concert it is arranged that one set of persons attend to them exclusively and uninterruptedly, and are supported by another set who can wait for their repayment till the enterprise is completed ; for example, till the palace is ready for habitation, the great ship fit for sea, the canal or railway open for traffic. (*l*) Increase in the power of using local advantages. Of course a single and separate family can pay regard within its domain to what soil and position are fittest or least unfit for the several crops which are indispensable to it. But by division of labour it becomes possible for each district to attend specially to that branch of production wherein it has special advantages. Thus

different districts of England are devoted some to growing wheat, others to producing malt, others to dairy farming, others to breeding cattle, others to brickmaking, and the special advantages of certain towns for certain industries, as of Burton for brewing and Sheffield for steel grinding, can be turned to the general advantage, instead of being confined to the inhabitants of those towns. And this is the foundation of all trade between different localities. (*m*) Certain minor or disputable advantages, such as emulation excited by working together, inventions fostered by undivided attention to one pursuit, and time saved that else would be lost in shifting from one to another, can be passed by.

§ 98. The advantages of division of labour have led some writers into mischievous exaggeration. In a famous passage the sophist Bastiat (*Harmonies économiques*, ch. i.) describes what a village carpenter receives from society compared with what he gives, and triumphantly shews that "in a single day he consumes things which he could not produce himself in ten centuries." And Adam Smith, in an equally famous passage (copied, indeed, according to Marx, from Mandeville), concluding the first chapter of the *Wealth of Nations*, describes how the assistance and co-operation of many thousands of persons is required even for the frugal accommodation of the commonest artificer in a civilized country. But both passages are sophistical, because they lead us to think that the material welfare of the lower classes depends on technical contrivances and skill rather than on a good economical constitution. In reality there is no security that the 'accommodation' of an artificer may not be most miserable, though ten thousand men have acted in concert for his supply. What consolation is it to the wretched tailors and needlewomen of the East of London that their insufficient food, their scanty and hideous clothing and furniture, are drawn from the ends of the earth, the wheat from California, the tea from China, the sugar from the West Indies, the cotton from Virginia, the wool from New South Wales, the indigo from Bengal, the wood from Norway? There may be a technical triumph, but there is certainly an economical failure; for the material foundation of a good home-life is wanting. Conversely, is it felt as

any calamity by the Swedish peasant proprietors that the bulk of their substantial food, rye bread, potatoes, porridge (of rye, barley, or oatmeal), cheese, milk, and salt meat, and their warm and serviceable homespun dress of woollen and linen,* all come from close at hand, and are the work of but some dozen or score of co-operators? As though it mattered to a man whether half the world had had a hand in making his coat if the coat was none the better, and he none the better able to procure it!

§ 99. But not merely is division of labour of itself no security for even material well-being; but also there are certain evils connected with it and certain limits to its application, which need attention. And first as to the evils. Exclusive employment at some single operation may injure the body, inducing disease, or weakness, or deformity, which might have been avoided or lessened by variation of employment. Thus if the cutlers of Sheffield worked at cutlery only a week at a time, and were employed every alternate week as market gardeners, porters, or labourers in the building trades, their health and strength would, I suppose, be much bettered. But although this evil is a serious one, we must not imagine that the whole branch of medicine known as industrial pathology is the result of division of labour. This would be as unreasonable as to charge machinery with all the physical evils which as a fact have accompanied its employment (*sup.* § 81). For, though it is true that some trades or branches of trades are unfit to be the exclusive occupation of any one, whatever precautions are taken,† still in the main the special diseases of each trade can be removed or lessened by fit precautions, as moderate length of the working day, sufficient pauses during the time of work, meals only outside the workshop, use of baths and of special clothing for the work, sufficient supply of air and light, use of fans to blow away the dust, employ-

* See Mr. Gosling's Report, *Parliamentary Papers*, 1870, vol. lxviii. pt. 2, p. 353.

† Perhaps smelting copper, grinding steel, manufacturing chemicals, dipping lucifer matches, scouring pottery, and cutting glass, are occupations of this character. See Bevan, *Industrial Classes*, I. pp. 58, 85, 125, 126, 135, 136, 148, 177.

ment of no children till over a certain age, and then only when a doctor has certified that the given child is not specially liable to the special diseases of the given employment,* and so forth. And it seems a much more practical aim to seek to get these precautions enforced, than to seek to give to each workman a variety of occupations.

A second evil attached to some sorts of division of labour is of a negative kind. When a man's trade is to perform some simple, almost mechanical operation, it cannot serve as an exercise for his artistic and reasoning faculties; and his mental cultivation must be reserved for the time when he is not at work. Of this evil I have already spoken in connection with the introduction of machinery (*sup.* § 81), and it is enough to add that although a real evil, yet to those who understand man's position on earth it ought not to appear a very serious one; for it neither hinders a good physical nor a good moral life. And as I have already condemned the optimists, so now the pessimists in regard to division of labour. It is noticeable that Adam Smith appears in both characters, and if the passage in the first book of the *Wealth of Nations*, referred to previously, is extravagant, still more so is that in the last book (Chap. I. Part 3, Art. 2, pp. 350, 351, ed. McCulloch), where, following Ferguson, he declaims on the torpor and degradation of those whose occupation gives them no occasion for exercising their understanding. And perhaps he is right according to his own principles; only his principles are wrong (*vid. sup.* § 38, point '1').

As another evil is sometimes reckoned the increase of mutual dependence which results from division of labour; and laments are raised over a workman being a mere accessory, able to make nothing, only to contribute towards the making. But I cannot see that such dependence is in itself an evil, or that mutual independence is in itself a good; and it seems more correct and intelligible to say that among the many kinds of dependence which result from

* A medical examination of children and young persons, before being employed, is required by the Danish Factory Act of May, 1873. See, in the *Christlich-soziale Blätter*, 1879, p. 613, an interesting summary of Dr. L. Hirt's recent lesser work on the prevention of workmen's diseases.

division of labour some, but only some, are injurious. And further, unless the evils connected with the dependence can only be removed by diminishing the separation of employment, we cannot say that this separation is to blame for the evil. For example, the dependence of Londoners for their water supply upon some half-dozen almost irresponsible joint-stock companies is an evil which indeed pre-supposes but is not the fault of separation of employment; for the remedy is not in every house or street supplying itself independently, but in a change or reformation in the ownership of the waterworks. On the other hand, the dependence of a country with a large foreign trade on the political circumstances of other countries for much of its own material prosperity is an evil that can be charged to the separation of employments and can only be removed by diminishing the separation, that is, in this case, by diminishing foreign trade and increasing its own self-sufficiency. Whether it ought to do so is another matter; but even if the benefit from foreign trade always outweighed this drawback, it would not alter the fact that there was a drawback to be outweighed.

The foregoing concerns division of labour in matters economical. Into the discussion of division of labour in the several realms of politics, literature, science, and art, as the thorny questions of standing armies and bureaucracy, or the mean between narrow specialists and shallow smatterers, I need not now at least enter.

§ 100. Division of labour cannot proceed indefinitely, but is liable to several limitations. Obviously, if there are fewer men than operations, the same man must undertake several. Obviously, too, the separate employments cannot be more numerous than the separate technical processes in each branch of industry. Further, if each worker is to be fully employed, no greater number can be exclusively employed on a given commodity than enough to produce the quantity of it then and there required. Thus, to use the old illustration, if 48,000 pins a day were all that were required and could be disposed of in a given place, and if ten men could make them, pin-making could not profitably be divided into more than ten separate and exclusive occupations. In Adam

Smith's time the technical process of pin-making allowed at least eighteen separate occupations ; but in the case we are supposing, if each of these had been assigned to a separate workman as his exclusive employment, eighteen men would have been engaged in work for which ten were sufficient, and thus would have been idle nearly the half of every day. This is what is meant when it is said that the division of labour is limited by the extent of the market. (*Cf.* the analogous limitation to the increase of intensity, *sup.* § 72, and to the elaboration of training, *sup.* § 95.) Further, if the whole or any separate process of an industry is not continuous but only at intervals, like ploughing, sowing, or reaping in England, each uncontinuous even on the largest estates ; or like building suspended during the winter in Russia ; the industry or process is unfit to be any one's exclusive occupation ; for he will be idle much of his time. Finally, as division of labour, like all kinds of concerted labour, requires certain order and concord and trust, the absence or insufficiency of these may put a bar to its existence or extension. Co-operation cannot be very complicated among savages who are not amenable to discipline ; who will not adhere to plans concerted beforehand, and whose individual caprice prevents them performing each his allotted part in a combined undertaking (*Mill, Polit. Econ.* IV. i. § 2). And similar in its effects to this want of self-control may be certain forms of short-sighted dishonesty, which may altogether put a stop to trade and to any considerable co-operation (*cf. ibid.* I. vii. § 5), or at least entail a serious outlay on measures of precaution. (On this see *inf.* § 104.) Only let no one suppose that elaborate concert and extreme division of labour are tokens of a high condition of honesty and morality ; they are only tokens that rude and uncontrolled dishonesty are not prevalent. Because a country has not got the vices of savages, are we to say that it has no vices ? It would be as reasonable to denounce co-operation as the cause of the bulk of dishonest actions in the England of to-day, because, were it not for the opportunity afforded by the prevailing system of concerted action, the bulk of them would not be committed.

§ 101. Illustrations have often been given of how the enlargement of the market enables increase in separation of

employment, and the rural village with one shop for all goods, and one practitioner for all complaints, contrasted with the large town where through the abundance of customers there can be establishments exclusively devoted to some single article, as tea or tobacco, music or toys, and where the dentist, oculist, aurist, and surgeon (not to say the chemist and the barber) are distinct from the physician.* Here I wish rather to illustrate how technical progress has sometimes lessened the number of separate employments. Thus in pin-making the distinct operations which in Adam Smith's time numbered about eighteen, have shrunk up to two or three. "Previous to 1824," Mr. Bevan tells us (*Industrial Classes*, I. p. 91), "it took fourteen persons to make a pin; but by the production of the Wright pin machine in that year, the services of all but two or three were dispensed with, for this machine produced a perfect pin; and even the pointing, which was formerly done by hand, is now mechanically performed." Again, "not many years ago . . . the production of a gun was distributed over fifty individuals; but to a great extent this has been altered by the introduction of automatic machinery, by which all the various and complicated parts of a gun are rendered interchangeable." (*Ibid.* p. 98.)† Mr. Cliffe Leslie has noticed (*Fortnightly Review*, January, 1879, p. 44), in contrast to the movement towards 'differentiation of functions' in the industrial world a generation ago, some marked tendencies to amalgamation now. "Joint-stock companies have almost effaced all real division of labour in the wide region of trade within their operation. Improvements in communication are fast eliminating intermediate trades between producers and consumers in international commerce; and the accumulation and combination of capital, and new methods of business, are working the same result in wholesale and retail dealing at home. Many of the things for sale in a village huckster's shop were formerly the subjects of distinct branches of business in a large town;

* See Roscher, *Nationalökonomie*, § 60, 61, for many illustrations. Mill, *Princ. of Polit. Econ.* bk. i. ch. viii. § 6.

† Other examples are given by Marx, who lays stress on the effect of machinery in lessening division of labour (*Das Kapital*, pp. 481-483, 2nd edit.).

now the wares in which scores of different retailers dealt, are all to be had in great establishments in New York, Paris, and London, which sometimes buy direct from the producers, thus also eliminating the wholesale dealer." Only we must not exaggerate. For division of labour may not so much be lessened as changed in form: in place of a dozen petty shopkeepers, each with a separate business, there may be now a dozen different shopmen each confined to a separate department in some great establishment; in place of separate merchants on their own account may come separate agents of a joint-stock company or 'co-operative association'; and though progress in mechanics and chemistry may merge together a multitude of once separate trades and require the heads of industry to have wide information and versatility (*vid. sup.* § 77), the working hands may still, by the introduction of new arts and new functions, be distributed among as many separate employments as before.

§ 102. From concert let us now turn to discord, and glance at men not helping but hindering each other in the production or the preservation of wealth. And first let us look to wilful destruction and damage as distinct from the ravages of nature (*vid. sup.* § 66), and also from the unintentional injury of the earth by man (*vid. sup.* § 82-84). Intentional destruction can be private or public: it can be private, as scuttling a ship to profit by the insurance, setting fire to the crops, or ricks, or house of an obnoxious neighbour, or to the factory of an unpopular employer, breaking machinery that is thought to be injurious to the workpeople, pulling down cottages to clear an estate, or workmen's tenements in a town to make room for warehouses or mansions: it can be public, as pulling down houses to make a new thoroughfare or railway, breaking the machinery of coiners, and false weights and measures, and, above all, the destruction in foreign or civil war, a destruction by no means confined to the ravages of the enemy, but often a measure of self-defence, as when a country is wasted before the defenders retreat from it.

If we are to be at all clear in our notions on the economical effects of war, we must distinguish between different sorts of war and different sorts of places; and also between the direct and the indirect effects. Thus in the wars of the

Roses, and in some of the Italian campaigns in the fifteenth century, in the Crimean war of 1855, and that in Lombardy in 1859, the combatants sought to spare not to destroy property, unlike the civil war in America,* and still more unlike the desolating inroads of Norsemen or Turks. And then destruction by war can be far worse where cultivation is intense than where there is little intensity; for there will be far more to destroy. "To make a temporary sacrifice of the country so as to save the people and the State, as the Scythians did against Darius, the Athenians against Xerxes, and the Russians against Napoleon, becomes harder the better stocked the country is with durable wealth." (Roscher, *Nationalök.* § 44.) A land of artificial irrigation (like much

* The following statistics from a notice in *The Times* of Mr. F. A. Walker's official compilation, although the absolute totals may be incorrect, are, I expect, sufficiently accurate for judging the relative growth or decline of wealth in the various States of the Union; and if so, give an idea of how the Southern States (the seat of war) suffered. The total 'real and personal estate' rose from 16,159 million dollars in 1860 to 30,068 in 1870, that is nearly doubled. But this increase was confined to the North and the West, and indeed was there more than double, for in the South was a great decrease, as follows:—

Name of State.	Real and Personal Estate in million dollars	
	in 1860.	in 1870.
Alabama	495	201
Arkansas	219	156
Florida	73	44
Georgia	645	268
Kentucky	666	614
Louisiana	602	323
Mississippi	607	209
North Carolina	358	260
South Carolina	548	208
Tennessee	493	498
Texas	365	159
Virginia	793	599
•		
Total	<u>5,864</u>	<u>3,539</u>
Total without Kentucky and Tennessee	<u>4,705</u>	<u>2,427</u>

Although possibly a large deduction may have to be made from the first row of figures if slaves are reckoned in the money valuation of property for 1860, there would still remain an immense decrease.

of India), or where tree-culture is of primary importance (like parts of Italy and Greece), is peculiarly exposed to temporary ruin. Then, besides the variations of damage, we must consider also the loss of life, which by no means corresponds with the damage ; for it may be great when this is small, as the Russian losses in the Crimean war ; or conversely, as the almost bloodless but destructive ravaging of Attica at the beginning of the Peloponnesian war. We must, therefore, learn the special character of a war before we can estimate its effects. If the loss of life is small and the destruction of property though considerable is mainly of transient commodities (as annual crops, stores of food, fodder, and fuel, materials of manufactures) and of those durable ones of which the duration is but brief and which are easily replaceable (as pigs and poultry, stocks of clothing and bedding), there may be temporary pinching and privation, but in a few years all may be as it would have been had there been no war, the only difference being that a certain amount of wealth which would then have been consumed by the inhabitants, has instead been partly destroyed, partly consumed by the enemy. (Mill, *Polit. Econ.* I., v., § 7.*) But where either the loss of life has been heavy or there has been great destruction of wealth that is not merely durable, but very durable (as fruit trees and wells, bridges and aqueducts, farm buildings and workshops), then it will take many years and if the two evils are combined, many decades of years, for a country to recover, as France after the English wars in the fifteenth century, and Germany after the Thirty Years' War. And thus war can be like an earthquake in its fearful injury to the land and the people ; and worse, from being far wider spread and far more continuous than any earthquakes yet known (Hearn, *Phutology*, ch. xxiv. § 4).

* Analogous is the case of a failure of crops where there are good precautions, as once in India the local storage of grain, in view of such failure. The population could live from the store, and when the fresh crops came in continue on short commons till what they had taken from it had been replaced ; and then all would be as before. In the case where the transient wealth of the inhabitants was so completely destroyed or consumed by the enemy as to induce a famine, this would be like a failure of crops where, as in modern India, good precautions were not taken.

§ 103. We have yet to speak of the indirect effects of war upon production, notably the effect of the immense expenditure on the army in time of peace as well as in time of war, and the withdrawal of so many men from industry. But here we soon come into the region of the conjectural. In some cases, no doubt, it can be shewn that a country declining in wealth or population is declining because of war taxes and military service ; but sometimes other causes of decline may be present upsetting our reasoning, and if there is advance in wealth and population, I can only see guesswork before us. Thus I do not see how it can be proved that modern France and Germany would grow more rapidly in wealth or population if their military expenditure were lessened. They might ; but also they might merely change their net expenditure, not diminish it ; and consume more wine and less gunpowder. Or they might work less hard, and so have less to consume.

I will not attempt to enter on the further question of the effects of war upon the distribution of wealth among different nations and different classes or upon economical constitutions, except to notice the uncertainty of our speculations. Thus the wars of the Roses were *perhaps* the cause of a great subsequent impoverishment of England, by cutting off the ancient nobility and bringing in new landlords, who unscrupulously turned arable land into pasture. The Crimean war, *if* it led to the so-called 'emancipation of the serfs,' may have affected the production of wealth far more by this indirect result than by the direct loss of blood and treasure. A war may on the other hand be the deliverance of a really oppressed class, and in many other ways indirectly benefit production. It may put an end to a tyranny or anarchy which had been paralysing industry, as when Greece (assuming the current account to be true) was set free from the Turkish rule ; it may give cohesion to a distracted country, as may be seen by comparing Mexico before and after the attempt to place a foreign ruler over it ; and in general a foreign war may be the preventive of far worse civil war. And, finally, we must of course remember the two truths, first, that national justice and welfare are what are to be directly looked to if a war is to be justified,

and wealth and production only indirectly ; secondly, that successful war has been several times and most conspicuously the foundation, I do not say of national welfare, but of national wealth, witness the Roman republic gorged with the spoils and tribute of vanquished Macedonia and Asia ; the Italian mediaeval republics raised to greatness by the Crusades ; Holland becoming the great capitalist among the States of Europe during and because of its struggle with Spain ; England building up its commercial greatness not before but after and on the strength of an intoxicating course of victory by land and sea, from one end of the world to the other ; the United States acquiring their finest provinces and the silver and gold of Nevada and California by a plain and simple war of conquest.

§ 104. But let us turn from war and look to some of the other ways in which production is lessened by the vices and weaknesses of men. Here come those accidents due to carelessness or stupidity, and resulting in destruction or damage to property and death or injury to persons, and varying from trifles, like a child tearing its frock or a servant breaking a dish, to a fatal railway accident, or a collision at sea, or an explosion in a mine. Only trifles may grow important by their multitude ; and perhaps more property is annually destroyed or damaged in England by the carelessness of domestic servants than by all the accidents combined on the railways and roads, in the factories and mines.

Considerable waste may also come from mistakes in production, whether these come from pardonable miscalculations, or from rashness, pride or stupidity. " If a farmer persists in ploughing with three horses and two men, when experience has shewn that two horses and one man are sufficient, the surplus labour is wasted. If a new process is adopted which proves no better, or not so good as those before in use, the labour expended in perfecting the invention and carrying it into practice is wasted. (Mill, *Princ. of Pol. Econ.* Bk. I. Ch. iii. § 4.) Conversely there is great loss in making machinery which is scarce in use before it is superseded by some new invention. Means of communication (bridges, roads, railways, canals) may be

made and scarce any traffic may be forthcoming, theatres built and no audience to fill them, houses and no tenants to occupy them; and vast quantities of goods bought in order to be sold may be spoiled for want of purchasers.* A change of plan or purpose may render useless much previous outlay, as altering the shape of a house or the gauge of a railway already constructed. Again, there can be great waste of fuel and provisions by badly constructed fire places and cooking apparatus, or by bad management; and much may be thrown away which ought to be utilized. In which matters England has much to learn from Europe, and Europe from China.

Further, there is a great loss through the various forms of dishonesty. Naturally the mere transfer of wealth from one person to another is not in itself a loss; but there may be a great waste of labour or property to effect this transfer. In the army of burglars and pickpockets, of swindlers and usurers, some may work as hard as mechanics or sailors, and much more profitably to themselves; but their labour is utterly thrown away. Hours and hours are wasted in the toilsome work of deluding and overreaching purchasers, as by the Armenian traders in Turkey, or by retail dealers or the agents of wholesale dealers at home; and perhaps half the business of commercial travellers, who have been said to lie by profession, is mere waste, though highly profitable to themselves and their employers. And then there may be much labour not indeed thrown away, as the foregoing, but which is rendered necessary by dishonesty; as much of the labour of the police, as outlay in testing the quality and quantity of goods delivered, as watching those employed lest they defraud their employer by idling. And consider the sheer waste of property in the innumerable processes of adulteration and the production of endless articles that are unfit for use, silk dresses adul-

* Where goods more or less perishable, like articles of clothing, are not made and procured to order but on speculation, there may be great losses, such as prudent London tradesmen have to make a regular allowance for. Of course when goods are not spoiled, only 'depreciated,' and have to be cleared out 'at any sacrifice,' we must not reckon the loss to the country by the amount of this depreciation. For a good deal of what is lost by the seller is gained by the buyers.

terated with gelatinous substances, cotton goods weighted with 'size,' woollen garments that will quickly come to pieces, gimcrack furniture that will stand no wear, flimsy and fraudulent houses that begin to decay almost before they are completed, and require endless outlay on repairs. Consider also the amount of property used simply for precaution, the locks and keys, bolts and bars, safes and shutters, walls, partitions, palings, watch-dogs. (*Cf. Mill, Polit. Econ. Bk. I. Ch. vii. § 5.*)

Finally, since the mind can help the body, and since a man when his heart is in his work can do it with much less expenditure of vital energy than when he has to struggle against his disinclination, it is plain that even when we are looking not at social welfare but merely at productive capacity, it is desirable that labour should be joyful, and that discontent and repugnance to labour, like violence, carelessness, or dishonesty, are a drain on the productive power of a nation. And thus all doctrines and all social relations, which by their very nature are likely to injure contentment and willingness to work, stand self-condemned.

CHAPTER IV.

INDUSTRIAL DIMENSIONS (SIZE IN INDUSTRY).

Meaning of a Large and of a Small Business, § 105, 106—Nature of Grand Industry and Limitation to its Advantages, § 107—Nature of Petty Industry and Limitation to its Advantages, § 108—Dimensions in Agriculture and Cattle Breeding (Large *versus* Small Farms): Technical and Economical Comparison, § 109–111—Dimensions in Forestry and Mining, § 112—Dimensions in Fishing, § 113—Dimensions in Manufactures (Factories *versus* Petty Workshops and House Industry), § 114, 115—Dimensions in Transport, § 116—Dimensions in Commerce (Large *versus* Small Traders; Shopkeepers *versus* Co-operative Stores in Retail Trade), § 117, 118.

§ 105. From the preceding chapters it is plain that not every scale on which production can be conducted is equally advantageous, nor every locality equally fitted for every kind of production. Before, then, we come to consider the enjoyment of wealth, let us examine in the present chapter the fit scale of industry, and the fit locality in the next.

The question of the scale or size of industry has been considered of primary importance, and has occasioned endless discussions, in which the several champions of large and small farms, of machinery and hand work, of stores and retail trade, have argued and predicted, often with more passion than logic. We must proceed, then, with no little caution; and at the outset let us ask what we mean by industry on a large or a small scale. Following Roscher, who in the fourth chapter of his *Ackerbau* treats the question of size in farming with great clearness and impartiality, let us say that economical measurement is not geometrical, and that whether we are to call a farm large or small is to be decided by the social position of the farmer, and by the produce of the land when farmed with as much intensity as

is usual in the locality (farmed as highly as by most of the neighbours).

If, then, by a *business* we mean any connected series of industrial operations with a given capital and under the direction of a single person or body, and by a *farm* we mean the capital (fixed and circulating, land and cattle, buildings and crops, ploughs and seed-corn) of an agricultural business, we can make the following distinctions. A *large farm* is one of which the mere direction or management fully occupies an educated man, one of the higher class. If it is so large that others of the same class must help him in the management, it can be called a *domain* (Herrschaft). A *middle-sized farm* is one of which the direction does not wholly occupy the farmer, who has time to do some of the rougher and manual work, and who by his education and position is not above doing it, though most is done by his subordinates. A *small farm* is one which in the main is cultivated exclusively by the farmer himself and his family, and fully occupies them. If their land only partly occupies them it is not to be called a small farm, but a *parcel*. Naturally we must not confuse farms with estates, the capital of a given business with the property of a given individual. "One large farmer may take on lease the parcels of a number of petty owners, as sometimes happens in France. Much oftener a large landowner divides his property [or rather, finds it divided] into a number of small holdings; or a single owner may even have several large farms, each with its own farmer. On an average estates are, for example, larger in Ireland than in England, but the farms much smaller." (Roscher, *Ackerbau*, § 47.)

§ 106. The distinction of large, middle-sized and small can be made in the same sort of way in other industries besides agriculture, according as the practical head of the factory, workshop, shop, vessel, line of vessels, vehicle, group of vehicles, mine, water works, etc., is to be expected to be well off and well bred, exclusively and fully occupied in direction, or nearly so; or, secondly, does much of the lower as well as all the higher work; or, thirdly, does all the lower work, aided by his family or by others whose labour is only about equivalent to that of an ordinary

single family. We can thus distinguish between the manager of immense smelting works, his smaller rival, and the village blacksmith ; or, again, between the manager of a line of steam packets, the captain-owner of a tug or of an excursion steamer, and the humble ferry-man with punt and pole. Moreover, those vast industrial enterprises like railways, of which the mere direction is more than any single man can undertake, are like domains in agriculture ; while an analogy to the cultivation of parcels is to be seen when those small businesses—by industries—are carried on, which only occupy a portion of the time and contribute a portion towards the support of a family, as wool-weaving among the peasants of French Flanders, wood-carving among those of the Black Forest, and window cleaning for men, house cleaning for women among the poorer Londoners. Finally, just as in agriculture we have to distinguish farms from estates, the units of production from the units of possession, so in other industries, the capital of one business may belong to several persons, or the capital of several businesses to one person. Thus in England each railway, though one business, is owned by a multitude of shareholders, and a large fishing vessel is often the property of several part-owners ; while, conversely, a great portion of the capital of a number of small businesses is sometimes owned by one person, if he lets out sewing machines to petty dressmakers, or carts and barrows to costermongers, or nets and boats to petty fishermen.

Perhaps now what is meant by size in industry is clear enough for the purpose. But I wish it were clearer ; though indeed the nature of the subject-matter seems to admit of no great precision ; and between *grand industry* (*la grande industrie, der Grossbetrieb*) with vast factories, numerous hired workmen, and elaborate machinery on the one side, and *petty industry* (*la petite industrie, der Kleinbetrieb*) on the other side, where the independent artisan works in his own home or own workshop with his own hands and with only his children or two or three apprentices and journeymen to help him : we see not merely a number of intermediate enterprises corresponding to the middle-sized farms in agriculture, but also certain businesses so linked together that whether

they are to be called large or small is not immediately evident. For example, the first processes in making some commodity are sometimes performed in a factory, and then some further processes are done in their own homes by work-people who are paid by the piece. So a shirt factory in Londonderry, according to a Report published in 1864, employed 1,000 factory workers and 9,000 domestic workers scattered in the country (Marx, *Das Kapital*, p. 484). In London bootmaking is often done in this way for large or middle-sized shops; the shoemaker in his own home and with his own tools works on the leather or boots which he receives, and on returning them is paid so much by the piece. Similarly at Lyons and Crefeld the silk weaving is mostly done at home by small masters; but the material all the while belongs to the manufacturer, who supplies the silk ready for weaving and receives it back when it is woven (Roscher *Ansichten der Volkswirtschaft*, II. pp. 151, 152, 3rd ed.) Sometimes, on the other hand, the material is the property of the workman and the produce of his work is sold to middle-men or to the agents of dealers or manufacturers; so that his labour is rewarded in the shape, not of wages by the piece, but of the proceeds of a sale. Thus some of the Welsh small farmers weave the wool they have bought or have got from their own sheep, and sell the woollen cloth to Shrewsbury merchants; and the better off among the Birmingham hardware master workmen work on their own raw material which they have bought (*Ibid.* pp. 139-158). Such workers may be said to carry on each a separate and petty business; and so, too, even those others afore-mentioned who work on materials not their own. But if in their workrooms they are frequently supervised and directed, then indeed they can hardly be called masters or be said to carry on a separate business.

But it is of less matter what name we give to any class of producers or to any group of owners and workmen, if only we understand their mutual relations and their real position in the social body.

§ 107. The advantages which may be gained by carrying on any business on a large scale can perhaps be summed up by saying that greater concert is possible, and therefore the

advantages given in § 97 can be got to a greater degree the larger the business. For example, there can be greater separation between direction and execution; the director, head, or manager of the business may have a scientific training, otherwise impossible; and a man fit to direct or perform any higher function has not to spend much of his time in what an inferior could do as well. Again, the advantage (marked as j) of labour and the means of production being turned to most account is a conspicuous advantage of production on a large scale. To enclose a square space containing 400 square yards requires a wall 80 yards long. To enclose an equal amount of ground in four separate squares requires a wall of double the length. A workshop for twenty men or shed for twenty cows need not be ten times as long, broad and high, as a workshop or shed for two, and will not cost ten times as much. To smelt a given amount of iron a few large furnaces cost far less to construct than a multitude of small ones, and consume far less fuel. But there are limitations to the advantage of enlargement. Some are those already noticed as restricting separation of employment (§ 100). If each separate process is done by separate persons, the mere increase of workers in each department will of itself bring no increase in their skill or decrease in the cost of their education. And when the practical direction of the business grows more than a single head can manage, the time has come in many cases for the growth to cease, as a plurality of heads outweighs the gain that else would come from increased dimensions. Sometimes, indeed, two or even three heads are better than one. Sometimes no injury comes from a still more numerous body of practical directors. But in time in every business comes a point when it grows too big to be properly managed. Inventions like the telegraph or telephone, and accelerated transport of persons and letters may widen but cannot remove the limits of management. Again, as is obvious, a large business implies a (comparatively) large market. If a maker of agricultural implements has only one village for his customer, he can only produce on a small scale. Another class of limitations are those set by the physical world. We cannot build up to any height, or bridge over any space, or control any degree of force.

Inorganic matter cannot be bound together indefinitely: what is too big will tumble to pieces.

Thus we can say that in every business there is a point beyond which enlargement means lessened advantage; and if it is passed we can say that the business *sua mole laborans* deserves to be called a *monster business* (*Monstre-Betrieb*, cf. Schäffle, *Nationalökonomie*, § 264, 3rd ed.).

§ 108. Let us now look at some of the general advantages of business on a small scale. (a) The human body does not become stronger and taller as a business grows, and small implements are easier to handle and move than large ones. (b) External nature also sometimes puts a bar to large implements; as when ports can only be entered or rivers navigated by small craft, or when a mountain can only be traversed on foot or by mules, or when some natural produce is so scattered (as often pearls and fish) that no connected work is possible and little or no more can be got in any one spot by many men with large implements than by few men with small implements. (c) Further, a great saving may be secured in the costs of transport. If it is relatively cheaper to carry to market five pounds' worth of farm produce than five shillings' worth, it is still cheaper, as far as the cost of carriage is concerned, not to go to market at all, and to consume all the produce at home. If to send to a large customer is relatively cheaper than to send to a small one, it is cheapest of all when the customers are fellow villagers and no sending is required at all. And the smaller the farm the shorter the space to be traversed in carrying in crops and carrying out manure. (d) Again, if a workshop for fifty men is relatively cheaper to build than one for five men, it may be cheapest of all to have no separate workshop at all, as when a man's house serves as his workshop. (e) Similarly, though it may be an advantage for a business to be so large that to keep the accounts may form a separate department under specially trained clerks, it is a still more obvious advantage for a business to be so small and simple that no accounts, or only the roughest, need be kept at all. (f) A different kind of advantage can perhaps be called artistic individuality: works of art cannot be produced *en masse*; and the fancy of the workman has more room for its exercise

when he works with his own hand and independently. (g) Further, since the fewer the persons engaged in any business the larger is the average share of each in the returns, there is a presumption that those engaged in a small business will be more contented and diligent and careful in their work than in a large one. So we speak of the 'magic of property' almost converting work into play, and on the other hand, of the idleness and negligence of hirelings. (h) Finally, as a consequence of the last-named advantage is this further one, that in petty industry there is a presumable saving in the cost of superintendence, and the expensive precautions against bad work or idling (*sup.* § 104) can be dispensed with in part or altogether.

But just as there are limitations to the advantages of enlarging, so to those of diminishing the size of a business; and below a certain point there is loss rather than gain by any fresh diminution. Thus a fishery may be much better worked by a number of small boats than by a few large ones. Make the small boats still smaller and they will be all sunk by the first storm. There is saving in the costs of carriage when the Indian villagers are the only customers of the village potter, but there would be no further saving (to speak of) in these costs if three separate and independent potters took his place. The labour on a farm of ten acres cultivated exclusively by the owner and his household is likely to be more willing and more careful than that on a farm of 1,000 acres: but if the little farm is cut into three, the owner of each parcel is unlikely to give more attention to the land than it got before, and from being obliged to do some other work as well, if he is to get a living, is likely to give less.

And thus as the converse of a monster business we can say that one which is narrowed to such a degree that loss comes from its contraction deserves to be called a *dwarf business* (*Zwerg-Betrieb*).

§ 109. From the two preceding sections it is plain that, looking simply at technical not moral advantage, at wealth not at welfare, we cannot say simply that petty industry is better than grand, or grand than petty, or middle-sized than either. We must say rather that according to the particular branch of industry, and state of the arts, and locality, the

advantages of a given size may then and there be decisive to make it technically advantageous; and then there is the further question whether it is also advantageous morally; and we may find economical science giving maxims different from the precepts of a particular art (*cf. sup.* § 4) and recommending some size which may give by no means the finest immediate technical result, but which, being more conducive to good home life, is economically preferable. The question therefore of petty and grand industry is full of complications, and not to be answered off hand. Let us briefly consider it, no longer in general, but in regard to each particular branch of industry. And first in regard to agriculture.

In England the question has become, so to speak, the prey of political parties; and a "conservative" is in a way committed to be a champion of large farms, and an "advanced liberal" to be a champion of small farms. It is, therefore, hardly to be expected that either will make the necessary distinctions, or see the real point at issue. But an attempt ought to be made.

First, then, we must not confuse geographical and economical measurements. (*See sup.* § 105.) The more fertile a given district is, and the more intense the prevailing husbandry, the smaller is the geographical area of each class of farm. Thus if a market garden of twenty acres near London yields as much net revenue as an arable farm of 200 acres in Lincolnshire, the one rural business is economically as large as the other. Secondly, as I have already said (§ 105), we must not confuse farms with estates, the conditions of land-ownership (*Grundeigentumsverhältnisse*) with the conditions of husbandry (*Landwirthschaftsverhältnisse*). Thirdly, we must not confuse advantage with intensity—good farming with high farming—on which error, and it is a common one, I have already said enough (*sup.* § 72). The question of technical advantage is whether, on a given district with a given degree of intensity, farming is more advantageously conducted by a few large or by many small farmers (or, it should be added, by an intermediate number of a middle size); and this question is not even touched by comparing different districts of different fertility or with different degrees of intensity, as when it is said that in the Rhenish

Provinces of Prussia, where properties are on an average only nineteen *Morgen* (eleven acres), the average produce of corn is far more than in the North-East Provinces, where the mean size of properties is at least five times as large (see Roscher, *Ackerbau*, § 49) ; or when the Channel Islands with their small farms and large produce are contrasted with the comparatively large farms and small produce of the Isle of Wight ; or, on the other hand, when England with its grand husbandry is triumphantly shewn to produce more corn to the acre than France with its petty husbandry. Such comparisons are beside the mark.* Finally, we must keep clear of confusion in regard to the so-called net produce of husbandry. Sometimes the term is used, as it ought to be, to mean all the net revenue coming from the land ; sometimes not all, but only what is left after deducting the necessary food of the cultivators (so Mill., *Pol. Ec.* I. ix. 4). Sometimes, also, the relative amount of the net produce is looked to, that is the proportion to the number of those engaged in agriculture in a given country ; sometimes the absolute amount. But I need not enter upon these discussions, as they seem to me only a confused way of discussing the two distinct questions, first, with what size of farm in a given district can a given amount of produce be got with least outlay of labour and property ? and, secondly, what are the likely effects of the prevalence of any particular size of farm on the growth of the population of the district ? Let us examine the first of these questions, leaving the other for a subsequent chapter.

§ 110. Whoever compares the general advantages of pro-

* The praise bestowed on small farms by de Laveleye in his Essay on Belgium in the Cobden Club volume on *Systems of Land Tenure*, loses its value by his confusion of good farming and high farming. He must have forgotten the remarks of Roscher, *Ackerbau*, § 49, who shews among other things the little use of Rau's famous table of comparison between four different sized properties, which professed to shew that the larger the farm the smaller was the gross produce per acre, but the larger the proportion of the net produce to the gross. Only two of the properties were in the same district, and to compare even these two we have to assume equal fertility, equal skill and equal intensity of cultivation.--A number of references to the immense controversial literature on small *versus* large farms are given by Roscher, *Ibid.* § 53, note 14.

duction on a large scale given in § 107 with those of production on a small scale given in § 108 can see that certain crops and kinds of live stock, and certain conditions of climate, soil, and surface, are likely to favour one size of rural industry rather than another. For example, in the cultivation of cereals in the Northern half of Europe in the present condition of the arts large farms have the great advantage of being able, easier than middle-sized, and far easier than small, to employ machinery and steam power in ploughing, reaping, threshing, etc. Similarly in the production of forage and roots we may say, within limits, the larger the farm the easier the use of machinery. Moreover, the application, not only of the mechanical, but also of the chemical, discoveries of recent times is to be expected only from the hands of a scientifically-trained farmer, which a petty one can hardly be. And I imagine that agricultural chemistry has precisely its main field of action upon the annual roots, grasses and cereals of the colder temperate zone rather than upon perennial plants or in sunny regions where only fresh water is needed to turn a desert into a garden. In breeding cattle or sheep there is great saving in labour, as driving, watching, marking, washing, shearing, if the herd or flock is numerous. Further, if a district is unhealthy and only fit to be cultivated at certain seasons or hours, like the Roman Campagna, then, since the costs of transport must be heavy they had better be on a large scale, and a given degree of intensity is far better reached by the employment on the given area of much property compared with labour—substituting machinery for men—than conversely. And, in general, I think we can say that where intensification is fitly (taking technical success as the measure of fitness) in the form of employing more property rather than more labour per acre, large or at least middle-sized farms have an advantage over small.

On the other hand, where the spade can be better employed than the plough, and so notably in market-gardening, and where stones are scattered over the land, and where the surface is broken and steep, and little can be tilled except what stretches in artificial or natural terraces cut along the hill-sides, and where the fields and meadows are watered by the thousand rivulets from a channel of irrigation, in such

cases the concentrated force and uniform mechanism of grand industry is difficult of application, and petty industry has the advantage with its small instruments and careful labour. In particular arboriculture (as distinct from forestry or silviculture) in the warmer temperate zone, unless it be carried on with little intensity, is singularly fitted for the small farmer who can give to his vines and olive-trees, to his almond, fig, and mulberry trees, to his orange and lemon trees, the careful attention (pruning, propping, digging without injuring the roots, applying sulphur, etc., *cf.* Sonnino, *La Mezzeria in Toscana*, 1875, pp. 201-211) which is well rewarded. Again, in the management of poultry, the many homesteads in a region of small farms and the constant near presence of the cultivators gives an advantage which large farmers seem unable to make up, and goats being specially fitted for rough and stony regions belong to small rather than to large farming.

Let these examples suffice ; only let it be remembered that they are but examples, and that a volume might be filled with such. For there can be almost endless combinations of different crops and animals and different uses of the same crop (*e.g.* barley for malt or meal), and of the same animal (*e.g.* cattle for draught or for food), with differences of heat, of moisture, of surface, with uniform or variable seasons, with different degrees of intensity in cultivation and of knowledge and skill in the cultivators, and in their readiness to obey and work for others, or in their love of independence, or in their attachment to the soil. In each of these combinations the question of size can be discussed ; and any one acquainted with a rural district in any part of the world can give illustrations from his own experience. Here I will only add three remarks ; first, it is unlikely that in any large country the same size of farms will be the most profitable in every part ; secondly, the prevalence of any particular size is no proof, as we shall see (§ 111), that another size would not have been more profitable ; for the actual conditions may be the result of ambition or covetousness setting individual above national power and enrichment ; or, again, the result of dutifulness or patriotism, setting the welfare of the family and the state above individual enrich-

ment ; thirdly, although another size would have been more profitable in a given district, the costs of changing to it now (alterations of roads, fences, buildings, inlets and outlets for water) may swallow up the entire extra advantage or more.*

§ 111. But the earth is for man, not man for the earth, and the only use of the arts, and of the art of husbandry among them, is to contribute towards good life in society. If, then, it could be shewn that one particular size of farms was certain or very likely to produce discord and misery, it would have to be condemned by Economics ; and if another was shewn to be a certain, or almost certain, pre-requisite of social peace and happiness, it would have to be recognized as the right one, whatever the effects on produce. Now I think we can say confidently that at least in certain extreme cases farms can be of a size that is incompatible with social welfare. One extreme is when a few individuals obtaining the control of large districts have driven out a multitude of the cultivators, and by causing the land to be cultivated with less intensity have lessened the aggregate net revenue, though gaining so much larger a proportion of it for themselves as to profit by the public loss. In this way Italy suffered in the last two centuries of the Roman republic, England in the 16th century, the Highlands of Scotland in the reign of George III., and Ireland in our fathers' time and our own. Here, indeed, social peace and welfare require the

* Distinct from dwarf or monster farms are those of which it can be said simply that they are *missized*, being too big for one fit kind of farmer and farming, and too small for another kind. To pronounce what particular sizes deserve such censure requires much local knowledge. Mr. Keble (*The Agricultural Labourer*, pp. 76, 77, 214, 215) speaking of England, thinks that when the land is arable from seven to twelve acres is what a man can cultivate by himself ; that arable farms of twenty to thirty, or of forty to fifty, or of sixty acres are bad ; while from 200 to 600 acres is a good size ; but in dairy districts farms of from forty to fifty acres with ten or twelve cows answer well. (*See also Roscher, Ackerbau*, § 52, and note 2, for opinions of others.)—Not immediately connected with the question of size is that of shape, and farms can be *misshaped* as well as missized, namely, elongated, contorted, or in scattered fragments, an evil sometimes indeed unavoidable through the physical features of the country, but sometimes artificial. Perhaps small farms can be said to have been and to be more often misshapen than large ones.

restoration of the expelled peasantry, and so among other things the diminution of the size of farms. Again, if the population of a given district cannot increase because the farms are so large as to be unmanageable—monster rural industry (*cf.* § 107)—a diminution of size is indeed necessary, but only till the farms cease to be monster farms; and then, though they be still very large, if the fit degree of intensity is not reached, other causes rather than size are to blame. Another extreme is the so-called *morcellement*, the spectre of certain economists, who shudder at the sight of the crowded huts and miniature farms, or rather mere parcels of poverty-stricken cultivators, with she-goats instead of cows, baskets and wheelbarrows instead of waggons, spades and hoes instead of ploughs; scarce able to pay taxes; falling into beggary at the slightest calamity (*cf.* Roscher, *Ackerbau*, § 52). But we must be on our guard. First, we must not judge of whether a rural population is or is not 'miserable' from what those say who seek to justify its elimination. Secondly, it is no necessary evil for a whole district to be covered with mere parcels, that is, farms too small to give full occupation to the family upon it: they need be in no compulsory idleness; for they may add other occupations: domestic industries (*e.g.* straw-plaiting, lace-making, wood-caving), work in neighbouring factories or shops, work as fishermen, boatmen, wood-cutters, and so forth; and how prosperous mere parcel-holders can be is seen in the Swedish cottiers called *Torpäre*. Thirdly, where there really is misery, we cannot say that the enlargement of farms is required for its removal unless we are quite sure of two points: first, that these farms are so small as only to be parcels, and secondly, that an adequate supplementary industry is neither present nor procurable.

But if we put aside monster and dwarf-farming, can anything be said for certain on the social benefit or injury resulting from large, middle-sized, or small farms? To me it seems we can reach only probability, not certainty. Thus I think it is highly probable, but not certain, that in any large extent of country a considerable number of petty farmers is necessary for social peace and happiness. Of course this is but one among many requisites; and there may be an abundance of petty farmers and yet social welfare effectually

hindered by the oppression of so-called landlords, as in Ireland or Bengal, or of usurers, as in most of India and much of Germany and Austria, or of taxation, as in Madras, and by many other causes.* But the point is, not that there cannot be national wretchedness with small farmers, but that there cannot be national welfare without them. And this I think highly probable ; only the reasons for it must in this early stage of our course be taken on trust. Again, and likewise postponing the reasons, I think it probable that at least a few large farms are requisite, and also a considerable number of middle-sized, if the rural constitution is to be satisfactory. But we are dealing with words, and we must wait till the next book before we can deal with the realities of rural life.

§ 112. From agriculture let us turn to the question of dimensions in the other branches of industry. In forestry let us distinguish different circumstances. Where a country is sparsely inhabited and well wooded and without notable export of timber, there the obvious course for each settlement and each household is to supply itself from the adjacent woodland with timber and fuel as it is wanted ; and forest industry on a large scale is prevented by the smallness of the market. But where there is a large market, as for the Norwegian and Canadian timber exported to a number of different countries, or for the forests of Germany and France, with large populations close at hand needing timber and fuel, there forest industry on a large scale is possible, and is likely to be far more profitable, at least if it be forestry (silviculture) in the proper sense, that is not the clearance but the permanent use of a forest which is preserved in some way, as by dividing it into compartments, and each year clearing one and replanting another. In such cases industry on a large scale has the advantage, among others, of an immense saving in the cost of fencing the young plantations. But woods and

* The enthusiastic English and Irish advocates of peasant farmers require to be reminded, first, that small proprietors are quite as capable of exacting exorbitant rent as a plutocrat landlord.—*See de Laveleye's* naïve admissions of rack-renting by the petty owners in Belgium, being a matter of course (*System of Land Tenures*, Cobden Club Public. p. 273).—Secondly, that landlords are only one among a number of different kinds of oppressors ; for example, the legal and official harpies who in France devour so large a portion of each small inheritance.

forests have other uses than to be cut for timber, firewood, or charcoal, and are connected not merely, as we have seen (§ 84), with the integrity of the coast and the mountains, but also with a number of sports which make no small figure in the sum total of human enjoyment. Of these and their great economical significance I will speak later, and here only give the opinion that for the poorer classes the preservation of much forest land is likely to be a great benefit, and that for them it is of less moment whether or not the main forestal industry be on a large or a small scale, provided only that the forest is protected, and that the *bye-industries* connected with it are allowed to continue on a small scale ; namely, gathering dead and fallen wood for fuel ; fruit, nuts, mushrooms, and honey for food ; leaves for litter and manure ; turning in swine to devour the beech-mast and acorns, and cattle to crop the forest grasses, and other rights of common (servitudes), all of which may require to be defined and regulated if the forestry is elaborate, but by no means to be abolished.

The extractive industries comprise both the extraction of inorganic matter from the earth and such subsequent processes as can hardly be done elsewhere than at the place of extraction. Many of them presuppose a large scale of working, as most mines, where the preliminary and working expenses (shafts, galleries, pumps) are so great that they can only be worth while if the produce is large. In some cases where the object of the industry is locally scattered and requires little or no outlay, and a very little fetches a high price, a number of small and independent workers have an advantage, as in some sorts of gold-digging and gold-washing and seeking precious stones among pebbles. The lack of keen interest and the danger of speculation are great drawbacks to large industry in such cases. In others, where the material is locally wide-spread and very bulky, the size of the market is of great weight in deciding whether the industry be small, middle-sized, or large. The millions of bricks required in London annually make possible the vast brickfields of Middlesex and Kent ; the vast demand for slates for roofing and the easy water communications from North Wales make it possible to extract slates there on a large scale. On the other hand, we see near small towns

middle-sized quarries or brickfields, and miniature ones by the side of the solitary country house, homestead, or abbey.

§ 113. Fishing has been and remains a stronghold of petty industry. Under the common term fishing or fisheries* are included two industries, often connected, but still of a very different character, one conducted from or near the land, the other out at sea. The first—shore and river fishing—can in its turn be divided into breeding fish (pisciculture) and merely catching them. The former we see sometimes conducted on a large scale: so the eel-breeding at Comacchio on the Adriatic, where some years ago the fishermen in groups of about twelve each under a captain, numbered with their families (including widows, orphans, and those past work) some 7,000 souls. (See the account in the first and unabridged edition of Bertram, *Harvest of the Sea*, 1865, pp. 45–49, 457–462.) I imagine that were these lagoons not under connected management, but conducted by many independent eel-farmers, it would be next to impossible to distribute as profitably amid the labyrinth of pools, the young eels ascending from the sea their birthplace to seek fresher water. Oyster farming along the flat shores of Kent and Essex is large or middle-sized pisciculture; I cannot say whether these shores might be worked more profitably if petty industry had prevailed, as in France at the Isle de Ré, where in recent years a multitude of small oyster-parks, each only 20 to 30 yards square, have been constructed (Bertram, *l. c.* pp. 353 *seq.*) Mussel-farming, as carried on in the bay of Aiguillon, seems suited only for petty industry. The mussels collect on stakes fixed in the mud; the main work is to transplant them from stakes further out to those nearer the shore, and finally to gather them for consumption (Bertram, *l. c.* pp. 410 *seq.*) Here are no constructions which would be cheaper on a large scale; were the stakes sunk 50 feet into the mud and raised 50 feet above high-water mark, not a mussel more would be attached to them. Careful labour is wanted, not great force; empirical rather than scientific knowledge; and while a big boatful of men would stick in the shallows and ouze, a single person can traverse them in a canoe.

* Giving fish the popular meaning, which includes mollusca, crustacea, and some mammals.

Another example of pisciculture on a small scale was to be seen in the fish ponds formerly attached to each country house, and where the smallness of the market was an effectual bar to production on a large scale. Turning to the other branch of shore and river fishing, simply catching, not breeding, I cannot think of any examples except on a small scale ; which, indeed, seems in place here, because the animals which form the object of the industry are scattered, and little if any concerted action is required, and no elaborate machinery, but rather simple and unconnected labour. Such is the petty shrimping on the English coasts, as also the collection of periwinkles, whelks, and other molluscs by women and children for the supply of our great towns (Bertram, *l. c.* p. 384), and the taking of crabs and lobsters, which in the intervals of other business forms a useful bye-industry on some coasts for the fishermen and their families (*ibid.* pp. 385-387).

Fishing in the open sea (maritime or deep-sea fishing, *la grande pêche*), implying danger to life, and that the fishermen be also sailors, is quite of a different character to shore and river fishing (for example, in its main process scarce admitting the employment of women), but shows in the same way a variation of dimensions, only that the contrast and opposition is not so much between petty and grand as between petty and middle-sized. For the nature of the business hardly admits of its being so large that the mere direction would fully occupy an educated man. And thus, although we may use the term 'large,' it must not be thought to indicate a size corresponding to a large farm or factory. Let us look at some examples. Herrings must be cured within a few hours of their capture, and thus, if the fishing vessels remain out from three to six days, as off Yarmouth, they must be decked vessels, having stowage for salt and fish, besides water and provisions ; and still more where they are out many weeks, as the Dutch ; who work on distant fisheries ; whereas in fisheries like those of Scotland, where the curing is or was all done on land and the boats return every morning, small undecked boats have the advantage that there is harbour-room for them, but not for large vessels ; that they can be drawn up on the beach when not in use, readily examined and repaired, and easily launched, not to speak of their being

easier to fish from (Bertram, *l. c.* pp. 271, 272 ; Adam Smith, *Wealth of Nations*, Bk. iv. ch. v., pp. 231, ed. McCulloch). But, at any rate, on the exposed Eastern coast, decked vessels have the advantage of being far safer than open boats and perhaps give larger returns.* In the Cornish pilchard fishery are two branches, one the 'seine' fisheries, the seine or sean being a large net owned by the commercial classes, under whom the fishing is carried on by hired workmen ; the other the 'drift' fisheries, where the boat and net (of no great size), belong to the fishermen ; and there is continual animosity between them (James Quick, in *Fraser's Magazine*, Feb. 1877, pp. 219 *seq.*). On which side lies the technical advantage I cannot say, only that the law, as often in Great Britain and Ireland, favours the larger and richer producers when its protection should rather be given to the peasants of the sea.† Naturally, where fish can only or can be much easier caught by very large nets, or again by immense lines, such as those used by the fishing smacks from Great Grimsby—lines 7,200

* See E. W. H. Holdsworth, *Deep Sea Fishing*, 1874, pp. 276–279. Only we must take Mr. Holdsworth's evidence with much caution as of one altogether on the side of the larger fishermen and fishing.

† The law forbids: (a) the use of seans below a certain size ; (b) the use of drift-nets by day within two miles of low-water mark ; (c) the approach of drift fishermen within half-a-mile of a boat at sean-fishing. Holdsworth, *l. c.* pp. 189, 195.—How in Scotland the herring fishery in boats was injured by the Government Bounty given to decked vessels (busses) is told by Adam Smith, *l. c.*—Of the four principal methods of catching fish in the British seas, line fishing, seine fishing, trawling, and drift-net fishing (all described by Mr. Holdsworth), we can perhaps say that the last is the special method of the small fishermen, the second and third of the larger, and that the former legal restrictions or prohibitions of trawling, though perhaps chiefly meant to avert the exhaustion of the fishing grounds, acted as a protection to petty fishing. The progressive diminution of small fishing boats in the four years 1872 to 1875 inclusive, is probably connected with such changes in the law as the permission since 1867 of the sean-net in Scotland. I subjoin the figures for the first and last year of the four given in Holdsworth's *Sea Fisheries*, pp. 18, 19 (Bevan's Series) :—

Fishing Boats registered in the United Kingdom in 1872.		1875.	Boats.
Number of the First Class (15 tons upwards)	5,284	5,934	
Number of the Second and Third Classes			
(under 15 tons)	35,262	29,308	
Tonnage of the boats of the First Class	145,387	164,441 tons.	

fathoms long with 4,680 hooks—petty fishing is inapplicable ; only here as in other industries the business must be well distinguished from the ownership ; and in fact in Great Britain the ownership of the vessel and the fishing appurtenances is often split up into a number of shares. It may be added that deep sea fishing can be a bye-industry corresponding to parcels in agriculture. Thus, in Ireland, in 1872, out of 7,914 boats, 6,116, with crews of 22,747 men, were stated to be used for fishing on an average less than one month in the year, and to be used for the remaining eleven months for collecting sea-weed and carrying goods, turf, manure and passengers. (Holdsworth, *Deep Sea Fishing*, p. 346.)

Whether the preservation of petty fishing is called for by Economics or Politics, and if so, what are the fit means to this end, are problems for subsequent discussion, and not to be solved by those experts in the art who can only tell us that this or that mode of fishing will give the largest return, and not how this or that mode of life will best secure the lasting welfare of the fisher-folk.

§ 114. The industries comprised under the common title of manufactures are so numerous and heterogeneous that while little can be said of them in general it would require a volume to shew the application of the principles of size in industry to each in particular. I will not venture upon more than a few fragmentary remarks. First, the inventions of recent times (*sup.* § 76–81) have affected industrial dimensions far more in manufactures, transport, and commerce than in agriculture, cattle-breeding, forestry, mining, and fishing. Further, among manufactures some have been much more affected than others, notably two great departments, one the iron trade, that is, the earlier processes (as smelting, puddling, rolling,) in the preparation of iron ore ; the other the textile industries, that is, the earlier processes (as carding, combing, scutching, spinning, weaving, bleaching,) in the preparation of fibres, whether of wool, cotton, flax, hemp, jute or any other. In all these processes grand industry has gained great advantage over petty ; whereas precisely in many of the later preparation of iron and of fibres, as the hardware and clothing trades, petty industry retains its preponderance. Moreover, it is plain, if we remember the nature

of the respective advantages of a large and of a small scale of industry (*sup.* § 107, 108), that in different sorts and processes of manufactures some of the advantages are of decisive weight, others inapplicable. Thus in the present state of the arts, where coal can be procured at moderate cost, and elaborate machinery driven by steam is applicable, and where the largeness of the market and the exact similarity of each class of goods required enable production *en masse*, the factory has a great advantage over the petty workshop. For large and elaborate mechanism cannot be contained in the latter, and the expense of fuel, light and buildings absorbs far more of the profits. We may expect therefore on the coal basins, and where coal can easily be imported, that not only the two great branches of industry already mentioned, the textile and iron trades, but many others will be more profitably conducted on a large scale, as engine, machine, and implement-making, the manufacture of glass and pottery, tanning, distilling, brewing, refining sugar, preparing tobacco, and also the manufacture of some ready made articles of clothing. Even where fuel is dear it may still be profitable to use steam power; and then the very dearness of the fuel will enhance the advantage which large furnaces have in wanting proportionally less of it. But in many industries where machinery is inapplicable, or only on a small scale, or where the market is restricted, or where the objects of the industry cannot be treated in the lump, but individually, and few processes are exactly the same, middle-sized or small businesses have a great advantage over large. So in most of the endless kinds of washing, cleaning, patching, mending, repairing, altering; so in the production of fancy goods, as the *articles de Paris*; so in the production of genuine and original works of art, not mere reproductions; so in the clothing industries for the supply of the wealthier classes, tailoring, dressmaking, and shoemaking. For here the absence of special workshops, or proximity to the consumer, or careful and delicate work, or individual taste, gives an advantage to business on a small scale. In regard to the great department known as the building trades (including masons, bricklayers, joiners, plasterers, plumbers, painters, and others) we must distinguish buildings and localities.

Small and isolated rural homesteads and cottages scarce admit of any industry but what is small, while in constructing public buildings, large factories, and palatial dwellings there must be large industry unless they are to be many years before being finished. But for the majority of urban and suburban buildings middle-sized industry seems best fitted to meet the number of separate and scattered undertakings where elaborate machinery (as a steam-driven contrivance for raising the blocks of stone or the bricks) and a great company of workmen would be out of place, and yet where much technical knowledge is required for directing the work and several distinct trades for carrying it out.

From the foregoing considerations, and from our daily experience, it is plain that to say grand industry has swallowed up, or is sure to swallow up, petty industry, is incorrect, even if limited to North-Western Europe and North-Eastern America. True in England in some trades the process of substituting the factory for the small workshop is still in progression, as in hosiery and bootmaking; true that the cheap hand-made watches of Switzerland are being driven from neutral markets by the cheaper watches made by machinery in the great American factories, one of which employs over 1,000 hands (see account in *The Times*, Jan. 5, 1877): true that in many countries there is yet a great field for the spread of factories at the expense of small workshops.* But the tide may turn; I am not sure that the movement in England is all in one direction; and in France (according to a report of M. Ducarre in November, 1875), *la petite industrie* appears to be gaining rather than losing ground.† Nor is it impossible that electricity may prove a

* So perhaps in Prussia, where, from the census of 1875, Roscher calculates the numbers of those engaged in Grossindustrie at only 826,486, as against 2,791,022 in Kleinindustrie, of whom 2,246,959 are in workshops where not more than five workpeople are employed. (*Ansichten der Volkswirtschaft*, II. pp. 128, 129.) It should be noticed that in Prussia in eighty-two handicrafts the number to every hundred masters of journeymen and apprentices was in the years 1843, 1852, and 1861, respectively seventy-seven, eighty-two, and one hundred and four (*ibid.* p. 121).

† Roscher also (*Ansichten*, II. pp. 139-141, 152, 153) marks the prevalence in France of petty industry in fancy goods and cabinet-making (*tabletterie*), in silk-weaving, embroidery work, and (in some degree) in

force more favourable than steam to small production, and that mechanics may invent other instruments of petty industry as important as the sewing-machine.

§ 115. But in manufactures, as in other branches of industry, the actual dimensions need not be those which would then and there give the greatest return ; and for bad reasons or good reasons. Thus the proneness to snatch at immediate gratification regardless of the future, and the consequent preference for inferior goods, in particular for flimsy and unwholesome clothing, which attracts by its seeming cheapness, but really entails a greater annual charge than good clothing, which seems expensive : gives an advantage to large factories where what is shewy, smooth, and unsubstantial can be produced at a very low price, while the garments spun, woven, and made up at home are plain and costly, though lasting for many years and admirably adapted to local and personal requirements.* On the other hand, petty industry may prevail because a petty tyrant is more efficient in exacting for the lowest wages the utmost possible toil from his victims, than a tyrant placed higher. Hence the "sweating system" in the tailoring trade in the East of London, where the work is or was carried on in the "sweater's" own garret under his eye by five or six destitute men whom he boarded

making the so-called Paris shawls. He gives (*ibid.* pp. 154, 155), as the percentage in Paris of manufacturers (*fabricants*) :—

	In 1849	1860.
With over ten workmen	10·98	7·4
With two to ten	38·75	31·4
With one or none	[50·26]	62·1

For all France M. Ducarre reckons (1875) in *petite industrie* 596,776 employers and 1,060,444 employed ; in large factories 183,227 masters and 1,112,006 men ; in mines, 14,717 masters and 164,819 men. The number of those in petty industry would have to be put at a much higher figure, if we reckoned as belonging to it every business where not more than ten workpeople are employed. This has been done in the previous calculation regarding Prussia.

* To the substitution of cotton for coarse linen and woollen stuffs in the clothing of the Swedish town workmen the doctors attribute the increase of chlorosis and anemic diseases ; and the new clothing is only in appearance cheaper than the old, being less durable. (*See Mr. Engström's report, Parliamentary Papers, 1871, lxviii. p. 665.*)

and lodged, and who, often foreigners or Irish, were entirely at his mercy. It would have been next to impossible for him to make fifty or sixty men work so hard and get so little. Again, were the nailmaking of the Black Country not conducted in petty workshops behind the cottages of the workpeople, the women could hardly be got to work as they work now in this unwomanly employment. But though by concentration of the work in large factories there would probably be gain both morally and technically, the tribe of cruel parents, drunken husbands, and grasping middlemen would be sadly out of pocket by the change. But also in Great Britain and Ireland manufactures which might be most profitably conducted on a small scale may be kept on a large scale by the pressure of legal expenses and the impossibility of getting justice without paying a high price for it.

Good laws and institutions, manners and customs, can influence the dimensions of manufactures as well as bad. Where every village has a distinct costume, the petty local clothing trade has a great advantage. Again, where a large employer is bound by law to prevent those whom he employs, or has recently employed, falling into destitution; as in Sweden, where the owner of large mines, ironworks and manufactures, and within limits large landowners also, are so chargeable as to prevent their workpeople (including wives and children under age who live with their parents) becoming a charge upon the local authorities*: such responsibility is a check to grand industry.

On the other hand, the English factory legislation has favoured the substitution of factories for workshops. The contrivances required for safety and health (as fencing round machinery, fans, ventilation) can be introduced with less expense if on a large scale; and the various regulations restricting or forbidding the employment of children, limiting the period and the length of the working day for women and 'young persons,' dictating the times for pausing in work, forbidding meals within the workshop, and so forth, have given an advantage to those rich enough to introduce labour-saving machinery, as in the pottery trade, turning the wheel

* For details of the law see *Parliamentary Papers* 1875, lxxv. pp. 19, 20, 89, 100, 101.

(the 'jigger') by steam power instead of by hand, and drying the clay by hydraulic pressure instead of by evaporation.*

Whether an abundance of petty manufactures is essential to the well-being of a State is a question open to discussion; whereupon, indeed, I will not enter now, except so far as to make three observations. First, then, because in several countries the ancient organisation of handicraftsmen has been destroyed and unspeakable misery introduced by grand industry: it does not follow that factory work cannot be as happily constituted as the mediaeval guilds; just as no argument against the existence of petty and domestic industry can be drawn from the fact that in modern England the factory hands are in much better plight than the workmen under most 'little masters,'† and that domestic industry, as glove-making in Somersetshire,‡ is rather a curse than a blessing. Secondly, we cannot use for petty manufactures the argument for petty husbandry, that it implies a country life and can furnish a population producing mainly for their own consumption; for the artisan may live in the town, and must sell almost all he produces. Thirdly, I think it can be proved that for economical well-being it is necessary that some sort of petty industry be practised at home by every mother of a family. Only this need by no means be a manufacturing industry (as straw-plaiting, glove-making) or petty trade (such as I shall speak of immediately), even when the husband is engaged in urban manufactures or commerce; but may be, (and perhaps for the majority ought to be,) the cultivation of a strip of suburban garden, or the management of live stock (poultry, pigs, goats, cows).

§ 116. The transport of passengers and goods or the carrying trade is conveniently distinguished from manufac-

* See Karl Marx, *Das Kapital*, 2nd edit. pp. 499-502. Cf. C. P. Bevan, *Industrial Classes*, I. pp. 142-154.

† Mr. Bevan gives many instances. Compare, for example, the workmen of small with those of large masters in gun-making, lucifer match-making, straw-plaiting, and bread-baking (*Industrial Classes*, I. pp. 102, 134; II., pp. 117, 179).

‡ Only two or three shillings can be earned by a whole week's labour, often performed by mothers at the cost of neglecting their young family (F. G. Heath, *The English Peasantry*, pp. 60, 61).

tures on one side and from commerce on the other. It includes every business of which the main function is to convey persons and things from one place to another ; * and in recent times it has gained greatly in importance because of the great increase of exchange, an increase partly the cause partly the effect of modern improvements in the arts of locomotion. In the present state of these arts we see four main departments of transport, respectively by rail, by road, by inland waters, and by sea. In the first the maintenance of the way is inseparable from providing the vehicles and motive power. The need of all being under one management is obvious ; and industry which is petty or even middle-sized is excluded from working this kind of transport. Moreover, it costs relatively less to work a long line than a short one, and to manage an entire network of lines than a fragment of the network ; witness the numerous railway amalgamations and the absorption of small lines by great ones. But there is a limit ; and if a traffic manager has to trust to subordinates or is hampered by colleagues, amalgamation has perhaps been carried too far. In the other main departments of transport the maintenance of the way is distinct from the actual business of carriage, and there is no barrier to petty industry except where the sea is habitually too rough for small vessels. Moreover, on the road, on canals and small rivers, and on seas where the harbours are shallow, the size of each separate vehicle (waggon, barge, boat,) cannot exceed the capacity of petty industry ; and in such cases grand industry cannot use any different implements, but only a greater number of the same, worked in connection. This connection may indeed give a decisive advantage to grand or middle-sized industry where speed (so relays of horses along the road) and regularity are much in request,

* To attempt great precision in mapping out the field of industry and to discuss at length the exact boundaries between (for example) agriculture and manufactures, or transport and commerce, seems to me waste of time. The division which I have adopted, making eight branches of industry (agriculture, managing live stock, forestry, mining, fishing, manufactures, transport, commerce,) does not pretend to be accurate or complete, but only convenient. Adam Smith's division into four branches (*Wealth of Nations*, bk. ii. ch. v. *ad init.*) has no fit place for bankers, and gives too much prominence to retail trade.

and where there is considerable traffic ; but for casual irregular service, and where the traffic is small or speed of little consequence, there remains a permanent field for the petty carrier. Some of the best class of boatmen on the canals and the river near London own the barge which they manage, and work it independently on their own account. But for the bulk of carriage over deep and open seas large or middle-sized industry is a necessity ; for there can be no petty industry without petty vessels ; and these are unsafe. But still to the size of each vessel are set limits ; which indeed can be extended by the improvement of harbours, the introduction of steam propulsion and mechanical processes for launching vessels and hauling them up ; but not extended indefinitely ; and the unwieldy inefficiency of the immense steamship the "Great Eastern" is a warning against monster-vessels.

Turning from individual profit to social welfare, this, unlike that, seems to be little affected by the dimensions of the shipping. The size of the vessel, and whether it is worked singly or in concert with others, matter, I think, little. What matters is that the seamen, who by their position are more than most at the mercy of their surroundings, be surrounded by good laws and institutions, and not forced, as in much of the English merchant service, into a life of vice and misery.

§ 117. The word commerce is often used in a wide sense, but can be conveniently restricted by distinguishing it from manufactures where the main function is to change the form of the commodities which have been furnished by the fields, the flocks, the forests, the mines, and the fisheries ; and on the other hand from transport, where the main function is to change the locality of commodities (and persons) : whereas the main function of commerce is to facilitate changes in ownership, making it easier to buy and sell, to let and hire, to lend and borrow, to insure and be insured ; and the remuneration of those conducting such business has the character, not of freight, but of commission. Such are the majority of those known as merchants, warehousemen, shopkeepers, dealers, pedlars, brokers, financial agents, auctioneers, house agents, bankers, insurance companies and underwriters, and these, as well as the commercial travellers,

shopmen, clerks and others in their employment, form the commercial class. Perhaps the single word which best expresses them all is dealer (respectively, dealer's servant) as opposed to carrier, maker, or grower.

We are not concerned with the historical development of various kinds of dealers, but with the scale of their operations, whereon a few brief remarks must suffice.

The extremes of dimensions are very great, and the gradations innumerable, as we mount up from the disreputable depths of costermongers and market women through the respectable shopkeepers and the loftier owners of 'depots' and 'establishments' till we reach the heights of the great merchants and bankers. Obviously there can be no grand commerce without a large market (*vid. sup.* § 72, 95, 100), and in small and isolated communities there is not enough commerce to occupy more than a petty dealer. But where, through the multitude of exchanges, large dealing is possible, it is often profitable; and for many reasons. A large wholesale warehouse, or large retail shop, has relatively less to pay for the articles it collects together, can store them cheaper and save labour in selling them (dividing labour of salesmen, travellers, clerks, shopmen, and with fewer of them relatively). Note in particular the saving in correspondence and advertising: a letter costs the same whether the contents relate to five or five hundred pounds; and to announce that you have tea to sell does not cost you any less because your stock is little. Insurance (as a separate business, not a mutual insurance association), by its very nature, can only be on a large scale; and banking is almost in equal need of a large capital to serve as a guarantee of solvency. Only let us once more remember that large industry does not necessarily imply large owners, and conversely. Thus a bank may belong to many shareholders and a 'co-operative store' to many members; while conversely a number of small businesses may be owned by a single person, as when an English brewer owns a score of public-houses.

But there are limits beyond which grand commerce would become monster commerce and grow too unwieldy to be profitably managed; and also many causes may be at work to preserve or multiply middle-sized and petty com-

merce even in great cities and densely populated districts. For example, in many branches of the wholesale trade in England the facilities for borrowing, and perhaps also the insolvency laws almost encouraging bankruptcy, have raised up a crowd of small traders, keen-witted and unscrupulous, before whose reckless competition the richer capitalists give way and retire, disliking the rudeness and unable to compete with the frequent dishonesty of their companions.* And if a crisis sweeps off a number of small traders a fresh growth quickly takes their place. In retail trade a legitimate advantage of petty commerce is proximity to the consumer. To be able to buy close at hand is a convenience for which many are willing to pay dearly; and where every household requires to buy fresh provisions several times a week there is necessity for this retail business to be conducted from a number of centres, so that the goods, whether fetched by poor or sent to rich customers, may not have to be carried far. True, indeed, a large business may have a number of branches, and thus be locally scattered; I have before me the advertisement of a firm of grocers having thirteen 'establishments' in London, eight in the country, and five in Ireland. But there are difficulties (as of superintendence) which are likely to restrict such de-centralized businesses, and supposing unrestricted competition, I think the petty and lesser shopkeepers are not in danger of being eliminated by the greater and the grand.†

* See Bagehot, *Lombard Street*, pp. 8-17 (4th edit.), and an interesting leading article in *The Times*, 5 Jan., 1875. Bagehot's apology for the "rough and vulgar structure of English commerce" will be examined in a subsequent book.

† The importance of many petty centres in retail trade can be illustrated by two examples. An English wine merchant, instead of seeking to conduct retail business from one centre, has made many hundreds of grocers his agents throughout the kingdom; and has far surpassed all his rivals in the magnitude of his business, because there is so little trouble in buying his wine. The other illustration regards bread. Le Play has noticed (*La Réforme Sociale*, ch. xxxviii. § 4) that bread factories have failed because the sale and distribution of bread requires more labour than the making it, and therefore the advantage of production on a large scale in this minor operation are outweighed by the advantage the small dealer has in the major operation. But in London, where the daily or half-daily delivery of milk necessitates a scattered multitude of small

§ 118. The elimination of all retail dealers by so-called 'co-operative stores' (*Consumvereine*) is another matter. The rapid progress of these institutions in England and their admirable effect in reducing the sphere of fraud and extortion must not mislead us. Their essence lies in this, that the work of collecting, separating, packing, holding in readiness, and delivering in small quantities, is done by the consumers themselves or by their servants or agents, not by an intermediate class between the wholesale dealers and the consumers. What the retailer did has still to be done, and co-operative stores have arisen, not because the work in question was useless, but because it was badly organized and much overpaid. A wide field for fraudulent or extortionate gains lay open in England because of the ignorance and necessities of the poor, the ignorance, carelessness, and pride of the rich, and the dishonesty of domestic servants, combined with the silence or feebleness of the law, which for example punished and punishes adulteration and false weights and measures so lightly as to make a mockery of justice. This opportunity of overcharging attracted into the retail trade a number of traders proportionate rather to the gain to be secured than to the work to be done; and far more shops and shopmen, far more horses, carts, and drivers were in use than were really wanted for the process of retailing. Competition, that is, the legal capacity of any one to assume the office of a retailer without giving proof that he was competent or honest, or that the number of retailers was not already quite sufficient in the locality, instead of protecting the buyers, induced commercial *morcellement* or dwarf commerce; and exorbitant charges became necessary to support an exaggerated industry.* Most shopkeepers had too little

milk-shops, the head of a large bakery in which machinery is used has made many of these shops centres for the sale of his bread, and has employment at his bakery for over 100 journeymen. Unless the small bakeries have greatly improved in the last few years their displacement by machinery and large bakeries is for the bread-makers and bread-eaters a consummation devoutly to be wished.

* On the borderland between the industrial and predatory classes lies an example of how there may be many petty or middle-sized traders to do work that could be done as efficiently by a quarter of the number. I speak of the 600 pawnbrokers in London, some with several pawn-

custom ; they could not without ruin reduce their charges in earnest, that is, charge less for the same quantity and quality, not changing these as well as the price ; and many were rather material than formal extortioners. These evils account for the origin and success of co-operative stores which, as the law has failed to give protection, have come to the rescue of the habitual incompetence or inexpertness of retail buyers. But when the number of centres and of workers has been reduced to the requirements of retail work, then, if better laws and customs are introduced, the stores in their turn may decline and disappear. This indeed is not to be desired, as even with the best laws, the greater, *caeteris paribus*, the number of exchanges between interested parties, the more are the occasions of dispute, oppression, and dishonesty. We might almost say the less buying and selling the better. And perhaps we can say that the larger the dealer the more likelihood of his uprightness and justice, and that fraud and extortion, though they may be only too conspicuous in wholesale trade,* are less likely to prevail there than in retail trade.

And now, having traced the question of size through the various industries, we lay down as a general conclusion, that here as elsewhere man though influenced by his surroundings is not a slave to them ; that the prevalence of any particular size or the mixture of different sizes is no security for well being ; and that though it may happen in a given place and time that social welfare is only attainable if some change is made in industrial dimensions, much more than this change is required for its attainment and preservation.

shops, which traders and shops might with great technical and greater moral advantage be superseded by a central *mons pietatis* with local branches. But of this I hope later to speak at length.

* See Mr. Herbert Spencer's *Morals of Trade*, appended to the Hon. and Rev. W. H. Lyttelton's *Sins of Trade and Business*, 1874.

CHAPTER V.

PLACE IN INDUSTRY (INDUSTRIAL LOCALITY).

Actual Variation in Locality of Industries, § 119—Causes : Variety of the External World, § 120, 121—Co-operation helped by Concentration. Costs of Shifting an Industry, § 122—Effect of the Place of Enjoyment, § 123, 124—Effect of Industries being Joint. Influence of Means of Transport, § 125—Personal Reasons for the Locality of Industries, § 126, 127—The Growth of Great Cities, § 128—Examination of the Causes of this Growth, § 129-132—Judgment and Recommendations, § 133, 134—International Localizations : the Case for 'Free Trade,' § 135—Arguments against Free Trade, § 136-141—Conclusion on this Controversy, § 142.

§ 119. The variations of industry according to locality are almost infinite, and instead of a monotonous uniformity, we see as we travel a frequent change in the plants cultivated, the animals reared, the minerals extracted, and the goods manufactured. Some of these variations are familiar by sight or hearsay to every one. The tropical regions of the cocoa-nut and plantain, the warm lands of date palms and rice, the temperate zone of the vine, the olive, and maize, the cool circle in which the British Isles are placed, and the cold regions with forests of fir and larch, and crops of rye and oats, are easy to be distinguished. Similarly we see marsh lowlands and mountain slopes used for meadow or pasture land, the steep hillside for woodland, the sheltered valleys, the open plains, the moist coast land, the dry steppe, each for different groups of cultivated plants and animals. The distinction between country and town, and their various industries, comes from time immemorial ; in some modern countries is the further distinction between agricultural and manufacturing districts. Less familiar is the localisation of various kinds of manufactures. Thus the

nail trade in Great Britain is confined to a certain district in South Staffordshire and Worcestershire, and to a district near Bromsgrove and to Belper in Derbyshire (Bevan, *Industrial Classes*, I. p. 72). The locksmith's trade is almost entirely confined to South Staffordshire, where it has flourished since the seventeenth century, and even the sub-divisions are localised, different towns there being celebrated for different specialities of the manufacture (*Ibid.* pp. 77, 78). Redditch is the chief seat of the needle trade, though some are made at Harthersage in Derbyshire, and at Sheffield (*Ibid.* p. 91). Pottery is chiefly made in the district of North Staffordshire called after it, though the china clay has to come from Cornwall, and the flints from the chalk districts far away (*Ibid.* pp. 139, 140). The manufacture of lace by machinery is almost exclusively at Nottingham and around it (*Ibid.* II. p. 94). Hosiery is a trade limited to one district, large indeed but compact, in the counties of Nottingham, Leicester and Derby (*Ibid.* p. 105). And fustian cutting in England is limited to Manchester, Warrington, Lymm in Cheshire and the adjoining villages (*Ibid.* p. 111). A glance at a railway map shews us how certain districts are covered with a network of communications, which in others are few and far between. Commercial statistics tell us that Norway is the seat of a gigantic carrying trade for other nations, while in France this industry can hardly be said to exist. Moreover from history we learn how often industrial locality has changed. Italy was transformed in historical times from a land of timber, cattle and corn to a land of market gardens, vineyards, olive groves, poultry yards, and game or fish preserves. Cuba till the eighteenth century exported only animal produce, in particular, hides ; then it became a producer of tobacco, and recently of sugar and coffee. Wool was once by far the chief export of England : in 1879 it was about a 200th of the total exports of the United Kingdom. There is still iron in Sussex, but the iron trade has utterly deserted it. The harbour of Surat is empty, the Indian weavers a fallen race, and the Lancashire mill owners flourish in their stead.

Volumes might be filled with the industrial geography of the present and the past. But I am not writing a treatise on history or statistics ; and what concerns us is not so much

the fact, as the reason and the fitness of local variations of industry. We must ask why a given crop is grown or utensil made in one place rather than another, and why in the same place at different periods different industries are carried on, and examine what is necessary and what accidental in these varieties and changes, and what is fit or unfit, right or wrong. This chapter is meant to be a contribution towards the solution of these questions.

§ 120. The first and most obvious ground for the variations of industrial locality is to be found in the variations of the external world. Different plants require different degrees of moisture and temperature, and physical geography draws limits for all plants towards the poles, and for most also towards the equator, beyond which they cannot live or thrive in the open air. These limits may change, but only very gradually, with changes in climate and in the habits of the plant. And within the boundaries of their possible home plants may thrive more in one climate than another, as wheat returning twenty-five fold the seed in Southern Mexico and only about fifteen fold on an average in England. Moreover the extremes of heat and moisture as well as the mean may decide whether or not a plant can live and bear fruit, as we have seen (*sup.* § 63). And though the climate be the same, the chemical, or again the physical, composition of the soil or the subsoil may be of many different sorts, each especially adapted for certain crops, as in England a heavy soil for wheat, a friable soil for barley, dry chalk for sainfoin, and peat for rape. Some plants also cannot bear, others as the olive and the cocoa-nut palm delight in, the salt sea breezes. Illustrations might be multiplied indefinitely, and at all times it has behoved both the peasant and the planter to know

Et quid quaque ferat regio, et quid quaque recuset.—

VIRGIL, *Georg.* I. 53.

Domesticated animals, though less dependent than plants on their physical surroundings, yet cannot all live, still less thrive, anywhere; and are affected not merely by climate but by the conditions of the surface, as the buffalo delighting in the mud and water tillage of further Asia (Lord G. Campbell, *Log: Letters from the Challenger*, 1876, pp. 243, 244), or

horses seeking rich pastures and averse to rocky islands, which are the fit home for goats, as Ithaca,

Ἐν δ' Ἰθάκῃ οὐτ' ἄρ' δρόμοι εὐρέες, οὔτε τι λειμών
Ἦτοι μὲν τρηχεῖα καὶ οὐχ ἱππῆλατος ἐστίν,
Ἀγέβοτος δ' ἀγαθῇ, καὶ βούβοτος

Odyssey IV. 605 ; XIII. 242. 246.

Fishing is obviously confined to where there are fish to be caught, and the extractive industries to where there are minerals to be extracted ; and the more abundant the fisheries, the richer the mines, the more likely they are to be worked. But likelihood is not certainty, and in general we can say that the external world rather pronounces that in a given place a certain crop shall not be grown, and a certain animal shall not be bred, and a certain mineral shall not be worked, than that in some other given place they shall be. There can be no planting of vineyards in Scotland, no iron-mining in Holland ; and though these industries may be carried on respectively along the Rhine and in the weald of Sussex, yet they need not be.

§ 121. In manufactures it is convenient to distinguish the material from the instruments and accessories of production. A manufacture need not be situated where its materials are originally found or produced, but if not, there must be some reason to outweigh the disadvantage. If iron-works are not close to the iron mines, and the saw-mills not in the forest, and tanneries not hard by the slaughter-houses, and spindles and looms not in the midst of cotton-fields, there must be some reason for it. Sometimes this is to be found in the fact that the instruments and accessories of the given manufacture are in a different original locality from the material, and that it is easier to bring this to those than those to this. Thus the cotton of the southern states of America comes to the iron and coal of England to be spun and woven, and not conversely ; and copper-ore, though heavy to carry, comes from various parts of the world to be smelted at Swansea, and corn is carried from certain districts in Bolivia to be ground at a place over 100 miles away, where alone are good grindstones ; for these are too heavy to be conveyed far over the Bolivian roads. (E. D. Mathews, *Up the Amazon and Madeira*, pp. 256, 257). We can say in general that where fuel,

a commodity bulky by nature, plays a great part in a manufacture, the locality of the fuel almost decides that of the manufacture. So smelting formerly needed to be near forests as in the weald of Sussex, once covered with oaks, or among the fir-clad uplands of Sweden; and now upon the coal basins or near them.* It may happen that the accessory to a manufacture cannot be transported and thus decides the situation of the whole manufacture or some process of it. Thus the use of water as a motive power placed mills and factories along the constant and rapid streams of rainy valleys. Open and breezy districts were the seat of wind-mills. Flax used to be, perhaps still is, sent from afar to be steeped in the soft and sluggish waters of the Flemish river Lys.

The routes and terminal points of transport are obviously in dependence, sometimes absolute, on physical conditions (*vide sup.* § 62); navigable rivers and seas are not made but found by man; and in making roads, and still more canals and railways, he is compelled by the position of mountain and valley, of morass and sea-coast, to follow certain courses rather than others. It is true that the main lines of communication are likely to lie between the main centres of population; but the reason for these centres being where they are is in many cases precisely that their situation offers great facilities for communication. And as commerce presupposes and is dependent upon transport, it is plain that the seats of commerce are greatly influenced by physical geography. In an interesting essay on the geographical situation of large towns Roscher (*Ansichten der Volkswirtschaft*, 3rd. ed. 1878, I. pp. 330 *seq.*) notices various local advantages for traffic. (a) The centre of a cultivated plain is the spot where all the main roads, if they are straight, will intersect each other. Moscow, Prague, Vienna, and Berlin owe much to their being points of intersection of many lines of traffic. (b) The point of junction between maritime or tidal and

* A curious illustration is to be found in Oporto. Almost all the bread used there is baked at Vallongo nine miles off, and brought in every day on mule back, and has been so for centuries, because the ovens at Vallongo can be cheaply heated with the brushwood abundant on the hills around it. Latouche [Crawford], *Travels in Portugal* pp. 140, 141

freshwater navigation, where the mode of transport has to be changed, as at London, Antwerp, Glasgow, New Orleans, is a necessary stopping-place, and thus a convenient place for exchange ; as is also (c) the point of junction between river and land transport, as Ulm or Hanover. (d) The angle where a great river changes its general direction, as the Loire at Orleans, the Rhone at Lyons, the Rhine at Bâle ; or (e) where two rivers meet, as at Coblenz and St. Louis ; and (f) the point where the single stream is dispersed, as the Nile near Cairo, into many mouths, are all places of meeting of routes, and thus favourable for commerce. Similarly a good harbour, where (g) the good harbours are few and far between, so Lisbon, San Francisco, Rio de Janeiro ; or (h) if it is at the head of a deep gulf as Venice, St. Petersburg, Inverness ; or (j) being on an island, faces the adjacent mainland or larger island, as the harbours of Corfu, Negroponte, Rhodes, and Dublin. (k) The being on or near a strait concentrates a stream of trade upon Constantinople and Copenhagen, Messina and Cadiz ; (l) an isthmus between seas or rivers may give a similar advantage, as to Corinth, Lubeck, and Panama, or to Nuremberg between the Danube and the Main, Leipsig between the Main and the Elbe, Aleppo between the Euphrates and the Mediterranean. (m) The mouth of a mountain valley is the point of meeting for all who approach it, and a suitable place for trade, witness the girdle of towns round the Harz Mountains ; and we may expect towns at each end of a great passage which traverses or turns the flank of a mountain barrier, like the route from Augsburg to Milan, from Stauropol to Tiflis, or from Toulouse to Saragossa. (n) The importance of fords at certain periods and places is seen by the many names containing the English *ford*, the German *furt*, the Latin *trajæctum*, and the Slavonic *brod* ; and although bridges, being man's handiwork, must be excluded from the natural advantages of certain places for commerce, we must include among such advantages that of affording peculiar facilities for a bridge, as the island in mid Tiber at Rome.

Let us notice that many of the foregoing advantages may be possessed by a single spot, as the site of Lisbon, London,

and Lyons. Also with changes in the arts, notably in engineering and navigation, the importance of some natural advantages grows more, of others less; thus depth has become indispensable for a good harbour since ships have increased in size; the importance of far reaching inlets of the sea has been lessened by the invention of railways; and railways also have converted into a commercial advantage (o) the former disadvantage of a port being towards the extremity of a peninsula, witness the rapid rise of Brindisi.

Quitting the field of physical geography let us seek further reasons for the localization of industry.

§ 122. Co-operation among other possible benefits, may enable, as we have seen (§ 97, *ad l*), each industry to be carried on in the locality which has the greatest physical advantages for it, so that, for example, the highlanders may enjoy the corn of the lowlands, and the lowlanders the cattle of the highlands. But we are now concerned with the fact that even were there no physical inequalities, no difference of soil and climate, co-operation would still render advantageous a certain localization of industry. Mining, manufactures and commerce on a large scale may be advantageous (*sup.* § 112, 114, 117), and in these industries a large scale implies local concentration. But further, both for large and small manufacturers, provided the market is large enough to give employment to a number of them, there are many advantages in being congregated together, especially if the customers of each single manufacturer are distant and scattered. There can be common use and thus a great saving in means of transporting, lifting, landing, lading, weighing, measuring, storing (*e.g.* bonded warehouses), exchanging (market halls, exchanges); also there can be a further division of the labour of making and selling, and the manufacturer need not be in addition a merchant and a banker; specialists can make and repair the special machinery and attend to any special requirements of the given industry.* But the

* At Zurich the erection of factories for spinning cotton called forth at first a number of separate mechanical workshops (*mechanischen Privatwerkstätten*). The smith, the founder, and the turner, gained an unexpected field of work. Soon arose special factories for cylinders, steel

isolated manufacturer, if his works are not to be stopped at every serious breakage or dislocation in his machinery, must be burdened with a staff of engineers whom he cannot fully employ, or with an extra stock of machinery which habitually lies idle, and the more elaborate the mechanical processes the greater the advantage of concentration. Moreover, in an age of technical revolution inventions are much more likely to be made, improving the mechanical or chemical processes of manufactures, if there are models and drawings at hand to be studied, and physicists at hand to be consulted, and a likelihood that a man who has hit on an idea may meet quickly another who can give it a practical application, and a third who will supply funds, and if there are many eager to profit by and willing to reward the invention. But these conditions are to be found in a great manufacturing city, not around a factory far apart from others.*

From the foregoing we see there are advantages not merely in the concentration of many kinds of industry in towns, but also for special towns being the seat of special industries, even though any other town might originally have been equally suited for them. Thus Manchester and Bradford are geographically as fit, I imagine, to be the centre of the British hosiery trade as Nottingham; but Nottingham having once been selected, now has immense advantages from the fact of that selection. And to shift this trade or

spindles, bobbins, and carding instruments; finally, for complete spinning machines. At the great Exhibition of 1867 a machine manufacturer of Manchester exhibited seven different machines for bleaching, eight for dyeing, ten for drying, five for starching, fifteen for finishing. (Roscher, *Ansichten*, II. p. 65.)

* Much of what I have said is taken from Roscher, *Ansichten der Volkswirtschaft*, 3rd ed. II. pp. 64-67, and some from Mr. Hearn, *Plutology*, ch. xvii. § 7, who gives, I may add, a citation, referring I think to about the middle of this century, on the inferiority of the cotton-spinners of Lower Normandy to their English rivals, due mainly to this, that though the free export of machinery is permitted, yet after a few months some improvement, easily effected by some slight modifications in a place where mechanics abound, gives the Manchester manufacturers a start, and the French cannot get up to them without importing an entire set of new machinery.—Only let us not imagine that the constant technical changes here alluded to are the normal condition of any industry.

any other having an elaborate apparatus and many auxiliary industries to support it, and a highly trained body of workmen, and a renowned local name : entails such certain costs and the uncertainty of so many risks (as loss of workmen or customers), that there must be some very grave reason to account for it. It follows that an industry may cling to a place though the original cause of its coming there may have grown feeble or have disappeared. Thus the great agate factory at Oberstein in Germany was set going by the abundance of agate stones found in the neighbourhood, but continued on the same spot when the main part of the stones came from Brazil (Roscher, *Ansichten*, II. pp. 5, 6). It follows moreover, that if an industry is compelled to shift its seat, it is likely to remove to as little a distance as possible. Thus when disturbances drove the mediaeval Flemish woollen manufacture from Bruges, it settled in Ghent, and from Ghent passed to the neighbouring province of Brabant. When heavy taxation drove many cloth factories from Holland they went mostly just over the frontier to Limburg, the Liège province, and Aix-la-Chapelle. The factories in North Brabant have mostly come from Belgium upon that country being separated by a line of frontier duties from the adjacent province of Holland. (*Ibid.* pp. 6. 7.)

Naturally like all other cases of division of labour this local concentration of industry is limited by the extent of the market (*sup.* § 100). If Belgian cotton-manufacturers could only sell within the limits of Belgium they might indeed all be collected at Ghent ; but the amount of the cotton industry thus concentrated could not exceed the amount of its produce required in Belgium. But were the markets of Holland and Denmark opened, double the amount of cotton goods might be produced at that single Belgian town. And plainly with every improvement in the means of communication and every removal of tolls and customs around towns and between provinces and kingdoms, the greater is the possible concentration of each single manufacture.

Some of the conveniences of concentrating an industry in one town can apply to concentrating it in one quarter of a town. In the East special streets are often devoted to special trades. In London there is much localization of industry

in different quarters ; publishers and booksellers for example are congregated near St. Paul's Cathedral, musical instrument makers in St. Pancras, watchmakers in Clerkenwell and St. Luke's, coachmakers in St. Pancras and Marylebone, dyers and calenderers in Shoreditch and Bethnal Green, leather workers in Bermondsey, furniture makers in St. Pancras and Shoreditch (Hearn, *Plutology*, ch. xvii. § 6).

§ 123. Another influence on the locality of industry is the locality where its result is enjoyed. All preparation is for enjoyment, and the place of enjoyment may decide or influence the place where the previous processes are carried on. Unless these make the neighbourhood unhealthy or unpleasant, there is an obvious advantage in their being close at hand, as the cost of carriage is avoided. Where the enjoyable commodity cannot be moved it must plainly be finished on the spot, as a dwelling-house, although the component parts, as the stone, tiling, and woodwork, come from afar. Where the commodity can be moved, we can say in general that the less transportable it is, and the less efficient are the means of transport, the nearer together must be the places of preparation and enjoyment. Only the words transportable and efficient need explanation. The smaller a given commodity is in size, and the lighter in weight, and the more valuable to the greater number of persons, and the easier divided and re-united, and the better shaped for moving, and the less liable to injury by carriage or storage, the more transportable it is. And the cheaper the transport is between two given places, and the quicker, and the less liable to interruption, and the more adapted for all sorts of goods, and the less likely to damage any sort, the more efficient it is. It follows that round every centre of consumption or enjoyment, whether country-house, village, town or city, and along every line of communication whether path, road-way, high-road, canal, river, or railway, we may expect to see clinging those branches of industry the produce of which is least transportable. Given the habits and agricultural arts of Northern Europe, a large town, unless there are striking varieties in the soil and surface of its neighbourhood, is likely to be surrounded by certain rings of cultivation. Fresh milk and fresh butter, green vegetables

and fresh flowers, and also potatoes, will come from the inner ring on the outskirts of the town and along the railways. Next we may expect meadows and green crops (roots) for fattening cattle and for feeding the milch cows and horses of the inner ring. Thirdly comes the district of corn, which indeed may be grown nearer the city, but there mainly for the straw, here for the grain. Beyond is the place for breeding, not fattening, cattle, and for sheep-farming and the growth of timber and firewood. Analogous rings of cultivation might be drawn round the towns of other parts of the world, to do which in each case would require a knowledge of the sorts of agricultural produce required by the inhabitants. But whatever the variety according to different regions, in every region where large towns are thickly set, there may be no room for the outer rings of cultivation between them, and the traveller may hardly leave the market-gardens around one town, before he enters those around the next. Even when he is far advanced into the country, say amid woodlands and sheep-farms, he will be likely to find round each village or homestead a repetition in miniature of suburban husbandry.*

§ 124. The position of the rocks, of the beds of clay, and of the veins of ore may often induce men to settle in their neighbourhood ; but on the other hand the locality where men have for other reasons already settled, may decide which of these inorganic storehouses are worked and which are left alone. And the more transportable the produce, and the better the means of transport, the less dependent is extractive industry on the locality of consumption or enjoyment. Common bricks must be made near where they are to be used, as the wall of Babylon constructed from what was dug out of the great ditch around it, or London from the brickfields of Middlesex, Kent, and Essex ; good building stone can be brought from further, as from Bath or Portland to London ; while the precious metals can come from the furthest distance over the roughest mule paths. Similarly in manufactures fine porcelain can be transported further than common

* Many interesting details on locality for agriculture are given by Roscher, *Ackerbau*, § 40-46 ; for industry in general by Schaffle, *National-ökonomie*, § 265, 266 ; and for manufactures by Roscher, *Ansichten der Volkswirtschaft*, Essay X.

earthenware ; cutlery further than agricultural machinery ; the materials for the cooper and wheelwright, the carpenter and cabinet-maker, the coppersmith and machine-maker, the boot-maker and saddler, the tailor and dressmaker, further than the finished product of their labour. *Caeteris paribus* the work must be done nearer the place of use or enjoyment in the one set of cases than in the other. In commerce this place is sometimes of such moment that the dealers carry their stock-in-trade about with them, and conduct their business at the domicile of each several customer (itinerant vendors, of importance in all thinly peopled lands) ; and wherever there is dealing in articles of daily household use, the dealers (as the baker, butcher, or greengrocer) must be stationed near the buyers ; whereas the seller of durable commodities can await in his shop the occasional visits of distant customers, or meet them half way at a periodical fair.

Besides saving in the cost of carriage, let us notice another advantage of goods being prepared where they are to be enjoyed, that the wishes and the tastes of those who are to enjoy them can be more easily consulted and met if the preparation is conducted under their inspection and control. This is never so complete as when those who are to enjoy are no others than those who prepare, as when a family constructs its house and furniture from the wood of the commune or the lord, and makes its own clothes from home-spun flax and wool. But also when work is done for others it may still happen, particularly in regard to works of art and decoration, and personal adornment, that the neighbourhood of the patron gives a great advantage ; the centres of residence of spiritual or temporal grandees have been historically the centres of the decorative arts ; and numerous and distinctive local costumes, such as had developed in Europe in the seventeenth century, require in each locality a special branch of the textile and clothing industries. But there are societies where the lower orders, clad with the dignity of independence, have in the material order to forego well fitting and well made clothing and to be content with the ready made goods not inaptly entitled slops ; and these can be put together at any distance from the future wearers.

Analogous effect may be due to a very different cause : among the Hindoos needle and thread are little used because both men and women have the art of enveloping their persons completely and yet gracefully in long pieces of cloth just as these come from the weaver (Royle, in *Lectures on results of Exhib. of* 1851, Vol. i. p. 505); and the weaver may be far away.

§ 125. In looking at the effects of the foregoing causes of localization as well as of those which are to follow, we must remember that many kinds of produce, and thus many kinds of industry, are technically connected together. The closest connection is where two or more commodities are the joint result of a common operation, as beef, tallow, and hides from a slaughter-house, sawdust and timber from a saw mill. In such cases it cannot be said that the principal product decides the locality of the industry ; it may be so—perhaps no sheep would be bred in England if sheep farming yielded only wool and no mutton, and none in Australia for the English market if the produce was mutton only, and no wool—but it need not be so, for the balance of advantage may be turned, and the locality of the entire industry fixed, by the facilities, for making or making use of some accessory commodity. Thus the main reason for the distilleries of Europe being located in the country rather than in the town is perhaps the greater opportunity which the country affords for using their refuse as food for cattle or as manure. (*See Roscher, Ansichten, II., pp. 35–37.*) The rotation of crops is another kind of technical connection ; we may see a given crop occupying fields in which it never would have been planted were it grown for its own sake and not as preparing the ground for something else ; but conversely the principal crop in an agricultural course may be drawn to districts where the accessory crops are particularly remunerative. Analogous is the need of particular kinds of freight as accessory to the carriage of other goods. So arose the potteries of Glasgow to supply a bulky freight to fill up the vacant spaces in the ships of the merchant exporters (Hearn, *Plutology*, ch. xvii. § 7).

Let us remember also the immense influence of the means of transport. Not only for area but also for distance

economical measurement is not the same as geometrical ; and while the one is fixed, the other changes with opening fresh routes or introducing fresh means of locomotion. And as some industries cling to the lines of communication (§ 121), it is plain that every change in these is likely to bring some dislocation to those. The inns along a turnpike road are deserted for those near the railway ; the extension of a grand route or railway or canal is likely to shift to the new terminus the business of collecting and warehousing merchandize ; the trade collected at the first bridge over a great river or estuary may take flight if a bridge is constructed still lower down its course ; the opening of the Suez Canal is beginning to give new life to the commerce of the Mediterranean ; the American railways and Atlantic steamers are drawing away from England the cultivation of wheat ; rural districts sixty miles from a great town can now supply it daily with fresh milk sent by train. In glass making, distinguished by the vast quantity of fuel required, and by the extreme fragility of the product, the second characteristic formerly confined the manufacture of very large mirrors to the place of enjoyment, that is to cities like Venice, Paris and St. Petersburg ; but with the improvement of means of transport they can be carried more securely and made where fuel is cheap (Roscher, *Ansichten*, II. p. 19). Railways are lessening the relative advantage of the coast over the inland districts in the manufacture of raw produce brought (like cane-sugar, cotton, tobacco, or jute) across the seas. Railways also and steamships have doubly fostered the concentration of many industries in great cities by enabling an almost indefinite extension of the market for urban industries, and also by enabling an almost indefinite aggregation of men to be securely supplied with fresh food and other transient enjoyable commodities. To which matter I shall have to revert (§ 132).

§ 126. But the locality of industry, as well as its size, is subject not only to technical but also to personal influences ; and each field in cultivation, each mill at work, affords matter for speculation on the numerous causes, the battles and revolutions, the political or industrial anarchy, the penal or protective laws, the taxes, tariffs, military requisitions, civil

interposition, religious precepts, national sentiments, which may have contributed to fix or to preserve the place of that given industry. We are not indeed now concerned with the reasons why one article should be made and one crop grown rather than another. This mainly depends on the tastes and habits of various populations, and will be considered in subsequent chapters, when we treat of the enjoyment of wealth. Here we suppose given tastes and habits, and have to examine, not why the food of an Englishman is different from that of a Chinaman, and whether it ought to be, but where the oxen and wheat for the one and the swine and rice for the other are likely and where they ought to be produced. One set of reasons have already been considered ; we have now to look at the personal reasons just spoken of. But concerning these I will not attempt more than a few brief illustrations.

The insecurity of the open country may induce artisans to congregate in towns ; a circuitous route, but safe, may be preferred by traders to the chance of being plundered on the direct route ; a jealous or rapacious government may be a barrier to local concentration of industry, goods being less conspicuous, and therefore safer when scattered ; heavy taxation, inducing the removal of person and property to other lands, may shift the locality of industries at the same time ; governments also may lessen certain industries, or hinder their growth, by expelling certain classes of persons, as Jews, Moriscoes, Huguenots, Chinese, Christians, Catholic Religious Orders ; while conversely, by introducing such classes or favouring immigration in general, an industry may be planted or fostered, as when Flemings were introduced into England, or when Athens, by the favours bestowed on the alien residents (μέτοικοι), became a manufacturing centre for Greece ; the liability to military invasion may hinder certain forms of business, as the English system of habitually paying cheques on a banker cannot grow in France or Germany ; and the security from invasion gives England and the United States an advantage over continental Europe.

Another personal cause attracting industry to some locality is the presence there of a large number of possible workmen, and the attraction is stronger the more skilful they are,

and the less the remuneration for which they are willing or compelled to work. A new business, intended to be on a large scale and to give employment to many workpeople, is likely to be in a large town or populous neighbourhood ; and old countries with dense population, and, perhaps, a number of unemployed or half employed workmen, have in this respect a great advantage over newly settled countries. And where law, and religion, and custom are such that those who have wealth and are employers have *de facto* the maximum of power over their workmen with the minimum of responsibility, certain industries are likely to 'flourish' more than where those who have the control have also the charge of their subordinates. The unrestrained power of English factory owners in the earlier part of this century, of the North American slave owners before 1861, and of the Belgian and Anglo-Indian manufacturers at the present day, has encouraged the employment of a large number of workmen in some particular industries in these countries. Much of the industry now carried on in California would not be there but for the willingness of the Chinese to endure so much and receive so little (*cf. sup.* § 89, 90, on difference of race). Obviously none of those arts which pre-supposed scientific training can be carried on by an uncultivated race ; and the careful cleanliness of person and implements needed for some industries, as for making the finer sorts of butter and cheese, may be an obstacle not easily overcome by some rude pastoral populations (*cf. Roscher, Ackerbau*, § 177).

§ 127. Certain plants and animals being more adapted for small than large farmers, and conversely, the prevalence of certain dimensions of farms is likely to influence the locality of industry, over and above variations due to habits of consumption or to physical conditions of the country. As small farms have been absorbed in Ireland, the number of swine, compared with that of cattle, has decreased. Tobacco and flax are grown in many parts of Europe by peasant farmers, as fit to occupy the spare time of their wives and children, and especially giving employment in winter (*Roscher, Ackerbau*, § 44 and note 3) ; but they would be little likely to be grown on latifundia. The danger of being defrauded in buying and selling is a great reason for a simple peasantry to

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produce for their own consumption ; and for many, not only among peasants, but also among grand proprietors, not only among the country-bred, but also among townsfolk who have a footing in the country, as a garden or home-farm, there is a peculiar delight in the enjoyment of what comes from their own land, and there is no meal pleasanter than when the housewife

“dapes inemptas apparet.”—HORACE, *Epod.* 2, 48.

Even in England, where the facilities for buying and selling are so many, and the practice so familiar, most well-to-do families when in the country supply themselves with fruit and vegetables, though often, were they to buy and not grow them, their expenditure in money would be much less.

Patriotism (*Vaterlandsliebe*) is a powerful agent among settled societies in determining the dwelling-place, and therefore powerfully, though indirectly, influences the place of industry. It has many forms, attachment to the paternal home and patrimony, attachment to one's native village, or district, or county, or province, attachment to a great kingdom or even empire. In its various forms it may fill the frozen north and the parched south, the barren moorlands, the dismal maritime swamps and the steep and stony mountains, with inhabitants, and industry, and contentment ; it may be absent among nomads, or among a cosmopolitan bourgeoisie, or among those classes who, without solid property or fixed abode, are called a proletariat.

The preference for a town or for a country life may also influence the place of industry by influencing the place of enjoyment. The reasons for such a preference will be considered anon ; it is enough here to have noticed the fact. Further, a law may directly and avowedly affect certain industries in the regions where it is in force. Sometimes the growth of certain plants is compulsory, as of wheat once in Egypt, whence a tribute of grain had for centuries to be sent to Rome (and later to Constantinople), or when, as in various parts of Germany in the last century, a man had to plant a certain number of fruit-trees at his marriage, and the communes had to plant the road sides and waste spaces. So

Württemberg is full of fruit-trees to this day (Roscher, *Ackerbau*, § 171, note 2). Sometimes an industry is prohibited, as the cultivation of tobacco in Great Britain and Ireland, or of opium in India outside certain districts, or of vines in certain regions of the Roman Empire by Domitian, or of rice in Italy, except in remote or swampy localities, or the practice of various pestiferous, or disagreeable, or dangerous industries near towns. Less direct, but more numerous, indeed, overwhelming in number, have been the attempts to affect the locality of industries by prohibiting or by levying dues on exports or imports, or again by favouring the one or the other. Though well known to previous ages and extra-European countries, such measures have been especially conspicuous in Europe and in the colonies and dependencies of Europeans in the last three centuries, and have partly been directed to injure some foreign or subject country, like the English Navigation Laws, which struck, as they were intended to do, a heavy blow against the carrying trade of the Dutch, or the prohibition, in 1639, to export woollen manufactures from Ireland, whereby the woollen industry there was ruined : partly to benefit some industry at home, as the modern protective tariffs of the United States, Canada, Victoria, and Germany, or the French bounties on beet-root sugar.

Analogous to the encouragement or discouragement of special industries by frontier dues is the effect of differential taxation. If there is an excise duty on the production of some commodities, not all ; the less favoured are likely to be less practised. A land tax of no trifling weight, and assessed not according to the actual produce, but rather according to the capabilities of the land, is a barrier against the diminution of intensity in cultivation. The land will be farmed highly or not at all ; cattle-runs or sheep-walks will not take the place or prevent the extension of tillage or spade-husbandry ; and those branches of agriculture specially adapted to high farming will be pursued in preference.

Less familiar among the causes of industrial localization is the modern abuse of differential railway-charges, which, instead of being in uniform proportion to the cost, sometimes favour certain localities and even certain individuals, and,

perhaps, habitually are in excess for small quantities and short distances: an injustice which is injurious to industrial decentralization, and which is one, among many other causes, of the concentration of manufactures in giant cities (Schäffle, *Nationalökonomie*, § 304).

§ 128. The growth of giant cities, indeed, and the comparative or absolute depopulation of the open country, are phenomena which, though not unknown in past history, are a characteristic of this century in many countries, notably in Great Britain and Ireland, in France and Belgium, in the German and Austrian States, in New England and the Atlantic States, in Chili and Victoria. Thus, between 1801 and 1851, the increase of population was for—

The whole of Great Britain	191'4 per cent.
London	246'3 "
Sea ports	295'5 "
Towns engaged in cotton manufactures	382'4 "
" " woollen "	299'6 "
" " ironworking "	390 "
" " hardware "	316'2 "
" " silk "	304 "
" " other manufactures	324'2 "
Other towns of more than 20,000 inhabitants	310'4 "

The population of Prussia, exclusive of annexations, rose 88 per cent. between 1817 and 1867; of Berlin, nearly 273 per cent. The population of France, excluding Savoy and Nice, rose about 24'4 per cent. between 1818 and 1866; of Paris, about 154 per cent. (Roscher, *Ansichten*, I. p. 319). In England the returns of population for two groups, one comprising the districts in which are most of the large towns, the other the small towns and country parishes, shew that the first group from 1851 to 1861 increased 19 per cent., and from 1861 to 1871, 18 per cent., while the second group increased in the respective decades only 4 per cent. and 7 per cent. The apparent diminution in the difference of the rate of increase is probably due to some of the rural districts having assumed the character of towns, and to the growth of suburban districts at the expense in part of the more densely peopled centres of cities (James Lewis, *Digest of the English Census of 1871*, p. 11).

Such facts excite in some minds admiration, in others

astonishment, in others dismay. But all three sentiments, as implying some occurrence mysterious and unexpected, are out of place. For the recent growth of great cities can be accounted for, and was to have been expected; and thus to those who study this phenomenon, it is, according to their ethical condition, a matter of exultation, or indifference, or sorrow, but not of surprise. Many of the reasons which help to account for it have been given already in this chapter; and adding others to these I will endeavour, without attempting much precision, to make an intelligible catalogue.

§ 129. Four general heads of reasons for the collection of men into cities may be called reasons of piety, of politics, of pleasure, and of profit. I. Historically, many towns owe their origin (as Hamburg, Bremen, Magdeburg, Fulda, St. Gall) and some their greatness (as Jerusalem, Mecca, Benares, Lassa, and Rome since Constantine) to the possession of an oracle or sanctuary, or to being the seat of a religious community or of ecclesiastical government (Roscher, *Ansichten*, I. p. 326 *seq.*). These reasons have no doubt within the last two centuries had comparatively less weight than at many other periods, and have been comparatively inoperative in the work of modern centralization, but only comparatively. For, like all the other forces attracting to cities, religious forces have gained within recent years a great impetus through the revolution in means of locomotion, a revolution which, as we shall see anon, by removing the chief opposing (centrifugal) forces to urban concentration, has allowed freer play to all the attractive (centripetal) forces, whatever their character.

II. To serve as a refuge from the foe, or as seats of the court, the Government, the army, or the navy, are political causes for the foundation and growth of towns. Thus Moscow has grown up around the palace of the Kremlin; the court and government have made Madrid a great city; strongholds like Metz and Gibraltar, or ports at the extremity of peninsulas, like Cherbourg, Brest, Plymouth, and Sebastopol, have grown to importance from military rather than commercial reasons; towns have been built on islets and narrow-necked peninsulas, on lagoons and hill tops for purposes of defence; and in

times and places there has been little security except behind city walls. Reasons indeed which are only military cannot account for more than a very restricted increase; for no great city can arise in a district habitually insecure; and the art of war forbids the concentration of all the military and naval forces of a large State at a single town; whereas there is no such rule of art (though the strongest counsels of true policy) enjoining the local dispersion of civil government; and it is possible to concentrate at a given point not only the habitual seat of the court and of the higher officers and offices of State, but also their subordinates, and, moreover, every important function of judicial and legislative authority. The dreadful wrong which political centralization inflicts on the weaker members of a nation and the weaker races of an empire, and the need (within limits) of every dispute being settled on the spot, every local matter being decided by residents in the locality, must be set forth in Politics not in Economics. We are here concerned with political centralization only so far as it collects men into great cities, and for doing this it can be most potent. Thus, the Athenians were well aware that by forcing their subject allies to bring all their main disputes to an issue at Athens, a constant stream of litigants and witnesses would flow through the city, bringing manifold gain, especially to those *καλοὶ καγαθοί* who owned houses which might serve as lodgings for strangers. The diversity of law between England and Scotland, and between the different States of the North American Union, is a barrier against legal centralization; the local legislatures of Jersey and the Isle of Man fertilize those islands with a stream of men and wealth, which else would be drained away to London.

III. The reasons of pleasure which draw men away from country life are many and varied. Friendship and society may for the rich or learned classes be sought in vain except in the town; here the votaries of music, sculpture, and painting find galleries and concert rooms, artists and musicians; here are libraries for students of literature, museums for students of physics, teachers for both; here invalids can have doctors close at hand, and a choice of them; here the lovers of fashion have the best opportunity of dis-

playing themselves ; here alone can be enjoyed to the full the delights of theatrical representations, which seem to act like a spell on human nature ; here is a constant succession of new sights and sounds ; here the restraints fall away of parental authority and of the opinion of the neighbours, and there is opportunity to indulge unchecked, unpunished, unobserved in every variety of intemperance and licentiousness.

§ 130. IV. Profit no less than pleasure may be a motive for collecting in a town. We have seen the advantage, sometimes the necessity of production and sale being near the place of enjoyment (§ 123, 124) ; and thus whenever many wealthy persons, for the sake of religion, of politics, or of enjoyment, are collected in a town as habitual residents, various industries will gather round them, notably building, repairing, decorating, making articles of fancy or fashion, and selling perishable goods. Moreover, personal services, good, bad or indifferent, are likely to find a profitable field only near the dwelling places of the rich ; and if these are in the town, thither also will follow maids and valets, lackeys and grooms, barbers and bathmen, musicians and actors, and manifold teachers and physicians ; thither also the tribes of prostitutes, swindlers, thieves, fraudulent beggars, and false-witnesses ;* thither finally—only these rather belong to political and to religious reasons—come the agents of police for the protection of life and property, and the ministers of religion to work in this pest-house of spiritual disease.

A second subdivision of this fourth head, namely of the

* Many of the causes aforegiven of urban centralization are given by Seneca in a remarkable passage (*Consolatio ad Helviam*, 6), wherein he notices the fact and the causes of the influx of population into Rome, as follows :—*Adspice agedum hanc frequentiam, cui vix urbis (i.e. of Rome) immensae tecta sufficiunt : maxima pars illius turbæ patria caret (live away from their native place) : ex municipiis et coloniis suis, ex toto denique orbe terrarum confluxerunt. Alios adducit ambitio, alios necessitas officii publici (e.g. to serve as judges), alios imposita legatio, (so far reasons of politics : now come reasons of pleasure) alios luxuria opulentum et opportunum vitiis locum quaerens : alios liberalium studiorum cupiditas, alios spectacula : quosdam traxit amicitia, (now he turns to reasons of profit) quosdam industria, latam ostendendae virtuti nacta materiam : quidam venalem formam attulerunt, quidam venalem eloquentiam. Nullum non hominum genus concurrit in urbem, et virtutibus et vitiis magna pretia ponentem.*

reasons of profit causing cities to grow, is made up of these advantages of concentrating industry, which spring from the great increase of co-operation made possible thereby. How important these advantages are in the present state of many of the arts has already in § 122 been sufficiently explained.

§ 131. A third subdivision of the reason of profit is the advantage of towns in the possession of certain materials of industry, notably the refuse or residue of personal consumption. Thus where, as in London or Paris, much meat is eaten, the hides, horns, and bones of the slaughtered animals remain unconsumed, and afford materials for the various stages and sorts of the great leather industry, for preparing glue, for making toys and fancy goods, and for much else (*cf.* Roscher, *Ansichten*, II. p. 50 *seq.*). Further, some mineral treasure may be so concentrated and so abundant that its full use requires the presence of a great body of men to prepare or enjoy it, that is, requires a town hard by. So there are towns by mineral springs, by oil-wells, and above all, by mines. Kuttenberg in Bohemia and Potosi in Bolivia were great cities because of their silver mines; Newcastle is founded on coal; and some other colliery districts are so densely populated with coal-workers as almost to form a town. But the towns which are so thick upon the coal basins of England and Belgium are mostly concentrations of men for the sake of manufactures, not for the sake of mining.

Reasons of profit not falling under any of three foregoing subdivisions can form a fourth. Such in certain states of the law and of manners is the advantage which an employer gains by carrying on his business in a town, that here is likely to be the meeting place of those who have lost employment, and that he can therefore easily increase the number of his workmen; that here, moreover, skilful, artistic and scientific artisans are, from the presence of the means of special culture, obtained with the least difficulty (§ 126); that if he is penurious or adventurous he can borrow with more facility than in the country; that his antecedents are less scrutinised, his conduct less controlled, the scandal of bankruptcy or of a conviction for dishonesty less known and sooner forgotten. And unfair railway tariffs (§ 127) may add

to the disadvantages of the country. The appearance of higher wages in the town may allure many unwary countrymen ; others are forced into the town by evictions when they or their peasant employers or customers are driven from house and home and the land is cultivated with less intensity or not at all. Thus in the dreadful period from 1846 to 1851 hundreds of thousands of Irish were driven from their homes in the country, and had no choice but to form the lowest stratum of common industrial labourers in the towns of Great Britain and the Eastern States of America.

§ 132. Such is a rough catalogue of positive causes of the foundation and growth of cities. But most have long been in operation ; some are less potent than formerly ; and the new fact of the urban centralization of industry requires a new cause to account for it. This is to be found not I think so much in any positive fact, in any fresh advantage of towns, as in the negative fact that in this century several of the chief hindrances to town life have fallen, and the old causes of attraction to towns are now able to work unhindered. Fallen is the former barrier of endless local variety of consumption which only local industry could adequately supply ; whereas for multitudes eating and dressing alike, and with the same way of life and amusements, there can be production *en masse*. So when the bonnets and plaids were yet worn there was a woollen industry in the Scotch Highlands, from whence now it has almost wholly disappeared (Roscher, *Ansichten*, II. p. 11). Fallen, moreover, through the grand improvements in locomotion is the twofold obstacle to city growth : the difficulty of conveying the produce of the town to distant consumers and the difficulty of conveying the produce of the country, notably provisions, into the town. Thus the English woollen industry, attracted by the advantages of a great town, was mainly centred in London as late as the reign of Henry IV. But then it gradually migrated, in order to be where living was cheaper, to Surrey, Kent, Essex, Berkshire and Oxfordshire ; later on, in order to get advantages (as water-power) for production, to Wilts, Dorset, Somerset, Gloucestershire and Yorkshire (*Ibid.* pp. 8-9). Now-a-days the locomotive and the steam ship are rapidly levelling the costs of living in the town and the country, and are

indefinitely enlarging the market for town goods, and are emancipating many industries from the need of being near their raw material. Fallen, also, through the invention of the steam engine, is the former obstacle offered by the need of working where the motive force of wind or water could be used: in open plains, on low sea coasts, along the rapid watercourses of hilly districts. True the steam engine requires fuel; but fuel can be conveyed, unlike the wind or the waterfall, into the town; and though an immense advantage has been gained by districts, as coal basins and their neighbourhood, where fuel is abundant, this advantage does not so much check the growth of towns as indicate which towns are to grow; witness the extraordinary growth of Birmingham, Leeds and Manchester, and many other towns on or near our coal-fields in contrast to the stagnation of many ancient towns in the un-carboniferous districts (as Hereford, Winchester, Lewes, and Exeter). Not to be omitted finally is the weakening of other barriers to the stream into the city, as contentment with simple pleasures and the accustomed measure of wealth, love of that rural independence which has most wants self-supplied, love of home and native village, filial piety and reverence for superiors, care of rich landowners for the material security and moral welfare of the country folk around and upon their lands, and other influences of a like kind, the decline of which has contributed, notably in France, to the triumph of the town over the country.

Let us at the close of the reasons positive and negative for the growth of cities notice that often a number of the reasons may be at work together, as when we find a bishop's see, a fort, and a royal palace all three in one town; that one reason often gives birth or new force to another, as when the nobles by coming to dwell in the city, from reasons of pleasure or politics, make it profitable for many of the middle and lower classes to follow them, or when the influx of pupils attracts masters, and the influx of masters in its turn attracts pupils; that sometimes reasons clash, as when the advantages which have attracted a gigantic manufacture to a given town render it repulsive as a place of residence. And railways have indeed in one way favoured decentrali-

zation by allowing a country residence to many whose main occupation is in the town.

§ 133. The growth of giant cities like London and Paris, New York and Berlin, ought no longer to excite our surprise. And the reasons which have explained their growth may serve to keep us from two opposite exaggerations : one imagining that the government of a country can distribute its population at pleasure, assigning so many to live in the country so many to live in the town, and fixing the number of towns and the population of each : the other imagining that modern urban centralization is entirely due to natural laws, against which there is no contending. In reality the actual distribution of population in various countries is due to a number of causes, some beyond, some within, the control of human society, and therefore can be much modified, but not altered at pleasure, by civil and religious authority.

But before pointing out what can be effected let us ask what is to be desired, and whether we are to regard the relative increase of town over country and of large over small towns as a good or an evil. Such questions require regard to time, place, and proportion ; and until we have treated of economical constitutions (Book II.) can only be answered with vagueness, in brief, and by anticipation. Let us say, then, that there is a measure of town life indispensable to literature, science and the fine arts, and advantageous to religious life, and that wherever this measure is not attained, an increase of the town population is to be desired. Dangers indeed are connected with the town even then ; and those who dwell there may be physically and morally worse off than those in the country ; but national life as a whole may be the better, for example, though the townsfolk be less healthy than the country folk, the average mortality of the whole people may be lessened by the growth and spread of medical science, which has its foundation in the town ; and though the townsfolk be unavoidably exposed to temptations which are not found in the country, the religious life of the nation as a whole may be improved by the religious literature and art, the frequent conferences and councils of the clergy, the development of theological science, for all of which the concentration of clergy and laity in a town is, if

not an absolute prerequisite, at least a circumstance extremely favourable. But when the modest measure of urban growth which suffices for such ends is once reached, there is no fresh gain by further growth sufficient to outweigh the injury to a nation that so large a proportion of its members are withdrawn from where health is better secured, and political life less embittered, and national tradition handed down more securely, and the love of the fatherland more rooted, and family life more vigorous, better guarded, closer united, and God, where His interposition is more evident, His voice more easily heard, His enemies less strongly arrayed, is more likely to receive His due. A country life, indeed, is no security against physical misery, witness the peasantry of Ireland and Madras now, and of France after the wars of Louis XIV.; nor against false religions and pernicious superstitions, witness the Hindus; and if it is averse to the heresiarch and the rationalist, it may also be averse to the Christian missionary, as we see from the word *paganus* (transplanted as 'heathen' or the like into the Teutonic languages), which in etymology means a country villager. That a country life, moreover, is not incompatible even with prevalent infidelity or again even with prevalent licentiousness has been shewn by the mournful examples of severally France and Great Britain in the present century. But we must not judge by exceptions, but look to probabilities; and then reason and experience will drive us to the conclusion that in the town there is less likelihood than in the country of the mass of the people being virtuous and happy.* It

* One worthy of being heard writes as follows :—"The life of a farmer is more conducive to religion and morality than that of an operative [in a town]; it is more healthful, it is more independent, it is more conservative, more equable, less exposed to temptation. In the country the family life has a sacredness of its own, and its sanctity is protected by special safeguards which are denied to the poor in cities. Ancestral traditions are handed down from father to son, and ancient manners—sure defence of wholesome laws—are held in reverence. The voice of God's minister is more distinctly heard and more willingly obeyed. 'The growth of cities,' says Buckle, 'has been a main cause of the decline of ecclesiastical power.' 'The city population of France,' says Michelet, 'which is but one-fifth of the nation, furnishes two-fifths of the criminals.' Special causes have depressed the moral character of the lower agricultural classes in England, but their superior morality elsewhere, both in

follows that the number and vastness of modern cities is no matter of exultation for those who care for the religious and moral life of their countrymen, but of sorrow; for although perhaps the greater number of the actual evils in these cities, as overcrowding (on which I shall speak in a subsequent chapter), are removable, if only there is the right spirit for the reform, there must be nevertheless a large residue of mischievous influences which remain irremovable.*

Europe and America, is undeniable. The percentage of illegitimacy in the city is double that in the country, and in the matter of divorces the same proportion holds good, while the city is notoriously the hot-bed of prostitution and drunkenness. The number of suicides among the industrial classes is nearly twice that of farming populations." J. W. Spalding (Bishop of Peoria, Illinois) in the *Dublin Review*, Jan. 1881, p. 103. And he goes on to speak of the evils to which the simple-minded, frugal, and reverent peasants of Catholic Europe are exposed in the cities of the United States, saying among other things:—"The parents have no power to select their children's playmates, and warnings against the danger of evil company are almost meaningless in neighbourhoods where the virtuous and the depraved are necessarily intermingled. The young are all taught to read; and nowhere else is such abominable stuff prepared for the exercise of this capacity. They cannot remain in their overcrowded rooms, and on the street they are made acquainted already in their tender years with every form of sin. The rum-shop and the drunkard are on every corner, the dance-house is not far away, blasphemy and obscenity are in the air, and the white bloom of innocence loses its freshness and fragrance, like a delicate flower in a frosty night" (*ibid.* pp. 104, 105). Those who would say that these are matters for the priest rather than the economist, and complain of theological intrusion, misapprehend fundamentally the nature of Economics; whereon I have spoken enough in the Introduction (especially § 4, 7, 8^a, 12, 13).

* The contrast between agriculture on one side and manufactures and commerce on the other (*Ackerbau; Gewerbfleiß*), is set forth with great learning by Roscher, *Ackerbau*, § 19-22, whose lack, however, of sound ethical principles renders him unable to give a satisfactory explanation or judgment. The opposing views of Adam Smith and of his editor MacCulloch on agricultural and manufacturing populations are curious and interesting. See *Wealth of Nations*, MacCulloch's ed. 1863, pp. 58, 115, 116, 350, 351. Cf. pp. 186, 187. In all such comparisons we must remember that manufactures neither in their ancient nor in their modern technical conditions are necessarily carried on in a town; and that therefore the contrast between town and country is very distinct from that between the field and the workshop. On the need of preserving petty industry in agriculture, see *sup.* § 111; and how the same reasons are not applicable to petty manufactures, § 115, still less to petty commerce, § 118. The advantage of the presence, the dangers of the pre-

§ 134. It follows that measures are to be sought in order to check the absorption of the country by the town. Many of these are for the science of Politics to discuss, and can here be summed up as political decentralization (*cf. sup.* § 129, II.). Another set of measures are sanitary and building regulations, which, by requiring every dwelling to be roomy, healthful, and solid, may give an additional importance to the advantage possessed by the country of cheaper building ground and building materials, and this all the more if masters and employers are made responsible for the dwelling-places of their servants and workmen. If, moreover, they are responsible for the subsequent subsistence of those under them, they will no longer be attracted to towns by the facility of getting 'hands' there, whom they can take on and turn off at pleasure. Abolition of differential railway charges (§ 127) and of unfair pressure of taxes on the country are

dominance of a rich mercantile class are well set forth by Ferdinand Walter, *Naturrecht und Politik*, 2nd ed. § 234: "This constant striving and speculating after profit may easily divert the attention of the mercantile class from the higher interests of the state and of mankind. They acquire a commonplace view of life, a one-sided estimate of human affairs; they are readily satisfied with themselves and indifferent to what rises above their own level. It is an evil, therefore, for the commercial spirit to gain predominance in a State. Yet an honourable position is due to the commercial class as a whole. For having studied in the school of real life they have acquired there a manifold wealth of experience, and they have taken a survey of the situation of the world in general; whence their higher culture is marked by a peculiar and honourable stamp. The possession of much movable wealth is connected with the more refined requirements of life, with taste, with patronage of the fine arts, with charitable donations, with other ends of public utility. It is therefore an important work of policy to bind fitly the spirit of the commercial class with that of the nation as a whole; and to do this two measures are particularly of use, a proper representative system in which commerce and manufactures have their due place beside land-ownership, and, secondly, a care for general culture." He proceeds to recommend that youths destined to be merchants learn history, literature, the history of art, and political science. (*Cf. sup.* § 94.) In fine, a State is likely to shew the healthiest growth of national life if it is neither exclusively agricultural or rural, nor again predominantly urban, nor predominantly manufacturing or commercial; but rather where there is a sort of balance or harmony between town and country and between the various branches of national industry, with a strong predominance, however, of agricultural employment and rural life.

obvious in their effect. Severe restrictions on reckless borrowing, and laws of debt, almost exactly the reverse of those which for some years (at least since 1869) have prevailed in England, would lessen the crowd of townsmen who are not, indeed, professional gamblers and swindlers, but are something not far removed. Good laws of succession to property in land, combined with political decentralization, and other measures of law and custom draw the rich to dwell in the country and to keep a multitude there along with them. Other laws can check diminution of intensity of farming, and the buying out or eviction of the peasantry, and, moreover, can foster home colonization, the reclamation of waste lands, the turning pasture land into arable and arable into garden. Efficacious also for keeping the rural districts well inhabited, may be laws and institutions which, as game laws, village festivals, and village recreation grounds, favour rural amusements; similarly a stringent enforcement of moral police regulations (as to drunkenness, immoral persons and books, and much else), which will much lessen the attractions of the town. And, finally, as the gratification of bad passions is so strong a motive enticing away from the country, and as religion is the best means of combating this motive, it follows that laws favouring religion favour country life.

Such are some of the measures, briefly stated, which may serve to check unfitting concentration in towns. And the very improvement of means of communication, the spread of the railway and the telegraph, which have hitherto been such powerful helps to the formation of cities, may yet in time render possible the existence of many rural factories, for example, giving facilities which may mitigate in regard to division of labour the disadvantages of isolation.

§ 135. Before this chapter on the locality of industry is finished we must glance briefly at international localization, and at the contest between the doctrines of free trade and protection; first noticing that, although not unconnected with, they are not the same as the policies which favour respectively the town and the country; for agriculture can be 'protected' no less than manufactures; and manufactures may be carried on in the country no less than in the town.

The terms protection and free trade can be used with

various and wide significations ; but here let them be taken to mean simply :—protection, a system of regulations, of which the chief is the imposition of heavy duties upon certain imported goods, intended to favour certain home industries, whether agricultural, manufacturing, or commercial, by preventing the home industrialists being undersold by foreigners, whether at home or abroad : free trade : the absence of such a system of regulations. For free trade in this sense the case may be briefly put as follows:—

Interchange of goods between nations arises because each is more fitted to produce one thing than another, and finds that the cheapest way of getting some commodity, say x , which it requires is not to produce it, or all of it, at home, but to produce some other commodity, say y , and send this abroad in exchange for the first-named commodity (x). Thus France, in order to obtain the amount of iron goods she requires, finds the best way is not to produce them all within her own borders, but to produce other commodities, such as silk goods, wine, eggs and butter, for which she has great physical advantages, and to send these to England in exchange for iron goods, for which England in her turn has great physical advantages. Both countries profit by the exchange, and this mutual profit is precisely what protection lessens or removes, turning the national industry from those branches of production in which it has more advantage to those in which it has less. The consumers of the protected commodities, say of x , are injured by being shut off from the cheaper foreign goods ; and if the producers of x gain by getting more customers or higher prices, there is a corresponding loss to the producers of those other commodities, say y , which, but for protection, would be exported in exchange for x . Protection, therefore, does not benefit even producers as a whole, but only one set at the expense of another ; while it injures consumers without a corresponding advantage to any one. The fundamental error of Protectionists is that they look only at x and overlook y , forgetting that foreign goods are not given us for nothing, but are exchanged for home produce or its proceeds. Nor is it any objection, even if it is true, that foreign goods have not paid the home taxes ; for these taxes have been paid by the home produce which has

been exported in exchange for the foreign goods. Protective laws can only alter the kind, not augment the quantity of goods liable to the home taxes.

The foregoing argument, when once apprehended, appears so conclusive that free traders have been tempted to enforce it on the refractory with the weapons of scorn and vituperation. And they have some justification in the perversity of Protectionists, who have often continued, in spite of argument, to declaim against the invasion or flood of foreign produce, as though it could come without being paid for, and to lament the 'unfavourable balance' of trade, that is, excess of imports over exports, as though any artifice, except bankruptcy on either side, could prevent a balance being reached of the creditor and debtor account between any one nation and the rest. And a lasting excess of imports over exports, instead of being a cause of dismay, indicates that the country possesses an accumulation of wealth and power; and is due to causes which are not difficult to point out, and which it is not in the power of protection to avert or induce.*

§ 136. But because some arguments against free trade are untenable, it does not follow that all others are. Let us hear some of these others.

A. The argument aforegiven in favour of free trade is based on two fundamental assumptions. The first is that each country, if laws do not interfere with its imports and exports, will produce that for which it is physically best fitted. But this assumption is often untrue, and for two reasons at least. First, a country may possess many natural advantages

* An excess of imports over exports lasting year after year, as in Great Britain, is due to causes like the following:—(a) The receipt of a tribute from some foreign State or dependency. (b) The receipt of interest for debts, owed either to the Government or the subjects by foreign Governments or subjects; as when the British Government receives interest on the Suez Canal shares, and British subjects that on Russian Government stock, or South American railways. (c) The receipt by permanent residents, alien or native, of remittances from property held abroad, as by rich Russians residing at Paris or Naples, or by Englishmen in England from their colonial sugar or coffee plantations. (d) The receipt of freight, commission, or other payments from foreigners, not for goods exported, but for work done in the shape of carrying, storing, and acting as commercial agents and brokers.

(as coal-beds, water power, and water communications) which may remain unused, and the industries that might be founded on them remain unpractised, because the costs of starting such enterprises are an insuperable barrier to their introduction, as long as the produce of other countries, who have the advantage of priority, can be introduced unhindered. New industries, like new plants, may require shelter ; when acclimatized they may be found to grow even more vigorously in their new home than in their old, and the costs of their earlier years is well repaid. Till the workpeople are well educated to the work, and the technical minutiae of the industry adapted to the special conditions of the country, there may be a heavy national loss, the produce being got at much greater cost than what it took to produce the goods formerly exported in exchange for it. But these expenses, which would ruin any private enterpriser or private company, are, as it were, the expenses of a national apprenticeship, and when once the machinery is brought into full working order, and the human agents are trained, it may be found that much more is got from this form of national industry than from the previous production of goods for exportation. Costs of transport are saved ; and especially use is now made of the rich treasures of external nature, and the perhaps richer treasures of national capacities and energies. To gain these advantages a protective tariff is likely to be the best means, by enabling and inducing enterprisers to introduce the new industry and distributing the costs of the introduction as equably as well can be over the whole people.* Moreover, the temporary, tentative, and acclimatizing protection of which we are speaking, and which is allowed by the more reasonable free-traders (as Mill, *Polit. Econ.*, Bk. V. ch. x. § 1), is more than ever called for in a time when the great development of means of transport has greatly lessened the

* "Blind free traders always like to assume that every man capable of working always busies himself ; whereas idleness frequently excuses the wasting of its time by the plea, that a remunerative market of the possible new products is improbable, or at least uncertain." (Roscher, *Principles of Political Economy*, transl. by J. J. Lalor, New York, 1878, vol. ii. pp. 432, 433.) This translation has three Appendices, not yet accessible in the German original, one of which, on the 'Industrial Protective System,' contains the above reference and others that are to follow.

former natural protection afforded by remoteness, and when, also, the assimilation of local and national tastes to a cosmopolitan fashion has nigh levelled the protection afforded by variety of tastes.*

§ 137. Secondly, an industry may be present or prevalent in a district, not because this is by nature particularly adapted for it, but because a bad economical constitution prevails there, and it is the industry in which the oppressors are able to extort most from their victims. If indeed oppression were as easy and profitable in one industry as in another, it would matter little whether protection or free trade prevailed. But it is not so; and free trade may foster in each several country the growth of those particular trades in which in each several country the workpeople—men, women and children, are least protected by law, or custom, or religion, or the nature of the employment, from overwork or underpay (*vide sup.* § 126). Thus we cannot say that because indigo under the regime of free trade is cultivated in Behar, therefore the land and people of Behar are particularly suited for it. For its cultivation is forced upon the unwilling peasantry by terrible threats and penalties. A thorough going free trader has honestly noticed how free trade enabled the Southern slave-masters, while employing their thralls in the few crude industries wherein alone their labour was efficient, to command all the comforts and luxuries of

* Compare the following passage from Roscher, *l.c.* ii. pp. 437, 438 : “The advantages of mere priority weigh most heavily, when the great development of all means of transportation almost does away with the natural protection afforded by remoteness; and when, at the same time, a certain universality of fashion, which, as a rule, is governed by the most highly developed nations, causes national and local differences of taste, which could be satisfied only by national or local production, to become obsolete. Under such circumstances it would be possible that a whole nation might be made continually to act the part of an agricultural district (*plattes Land*) to one earlier developed, leaving to the latter, almost exclusively, the life of the city and of industry. A wisely-conducted protective system might act as a preventive against this evil, the temporary sacrifices which such a system necessitates being justifiable where some of the factors of industrial production unquestionably exist but remain unused, because others, on account of the mere posteriority of the nation, cannot be built up.” And he justly reprobates the term ‘hot-house plant’ being applied to industries fostered by temporary protection.

civilized existence (Cairnes, *Principles of Polit. Econ.*, p. 476). With great simplicity Mr. Hearn (*Plutology*, ch. xvii. § 9) gives the example of Barbadoes to illustrate the beneficence of free-trade, and the doctrine of comparative cost, that is, that two countries can profitably interchange their goods, though one has an absolute advantage in all branches of production, if only this advantage is comparatively less in one branch than another. The doctrine is true; but the illustration needs comment. Barbadoes some years back used to import most of her provisions from the United States although she could raise them herself more cheaply, because she had, it is said, a still greater advantage in raising sugar and molasses. And the nature of the mutual advantage is put as follows, that the United States receive sugar which would have cost them the labour of (say) eleven days by paying for it with flour which costs them only that of (say) ten days; Barbadoes receives flour which would have cost her the labour of (say) eight days by paying for it with sugar which costs her only that of (say) six days. But 'Barbadoes' means the planters who control the land of Barbadoes, and 'labour' means the working expenses (industrial expenditure § 57) of these planters; and then to these indeed there may be advantage brought by free trade; only mark well that this advantage may not lie in the special talents of the inhabitants or special capacities of the soil being utilised, but in the particular crop being almost exclusively grown, which renders the negroes most helpless. As a fact, the planters destroyed the bananas and other food plants that flourished in Barbadoes, lest the negroes should use them; as a fact, the great mass of the people in Barbadoes have lain for years in abject poverty and misery, the helpless victims of political and economical oppression;* as a fact, when slavery in Haiti and Jamaica came to an end and was not renewed in another shape, the cultivation of sugar shrank up to comparative insignificance; as a fact, its cultivation in Queensland and the Mauritius rests on the 'cheap labour' of the oppressed Polynesians imported into the one country, and Indian 'coolies' into the other. It depends indeed

* Revelations on Barbadoes were given in the English Press in the summer and autumn of 1876.

on many circumstances whether in a given case protective duties are a fit means to check such abuses, to check, that is, the unhealthy gravitation of industry to the departments which for the nation as a whole are the worst remunerated or the least secure ; but whenever it is so, economical science calls for the introduction of such duties. And thus in the modern condition of the states of Europe and America no demand on Government is perhaps better founded than that for excluding (or for imposing heavy duties on) factory produce coming from countries where factory laws are absent, or insufficient, or unenforced, when at home such laws are efficient. True there is the loss of some profit ; for the protecting country gives up participating in the plunder wrung from the sweat and the life blood of the undefended factory hands abroad. But such a sacrifice is its own reward ; and moreover checks the abnormal growth at home of those industries in which for some cause or other (perhaps difficult to remove) the workpeople are worst off ; while it may foster or preserve those in which they are well off, to the immediate moral and perhaps ultimate material advantage of the nation.* In a similar manner protective duties, as corn laws in Ireland, might hinder the rooting out of a peasantry, and the lessening the degree of intensity of cultivation, as by the substitution of pastoral latifundia for arable farms and garden plots ; and indeed such evils presuppose a certain degree of free trade ; only that to avert them there are other means besides protection.

§ 138. B. The second fundamental assumption of the argument for free trade is that it is fit and desirable that each branch of production should be carried on only there

* A protective duty of the foregoing character is called by the Germans *ein sozialer Schutzzoll*. Such a duty was urged in the German Imperial Parliament by the illustrious Catholic orator Herr Reichensperger, 2 May, 1879, who noticed in particular, that the Rhenish spinning and glass factories, where the labour of women and children can be made of primary importance, suffered from the competition of foreigners, notably Belgians, whom the laws (or rather lawlessness) of their own country allowed to employ 'cheaper means of production' than the Germans. "What should we say," he added, "if some legislation forbade this or that mine-owner to use the labour of women and children, and at the same time let it be done by his neighbour?" (Apud *Christlich-soziale Blätter*, 1879, p. 354.)

where the physical conditions for it are most favourable. But this assumption contradicts that love of one's native land, that *amor patriae*, which has been and is one of the strongest affections of all settled races of men. As a fact, the vast majority of those who care for the public good at all, desire the accumulation of wealth and population chiefly and primarily within their own country, whatever its physical conditions, and desire it to be independent and powerful; while of those who profess an 'enlightened cosmopolitanism' the majority can be fairly suspected of cloaking under this pompous phrase a disregard of all interests but their own. Free traders indeed as a body are not to be reproached as unpatriotic; few would be found ready to sacrifice their own country for the world's enrichment; Adam Smith urges that defence is much more important than opulence, approves the Navigation Laws, and does not condemn a bounty on the exportation of home-made sail-cloth and gunpowder; moreover, it is generally admitted that besides being independent of foreigners for the supply of munitions of war, the supply of food ought not to be such as to be liable to interruption in war, as when Athens could be starved into submission by closing the Bosphorus;* while a free-trader like McCulloch extends this precaution to any important article, saying that "nothing can be more injurious . . . to the real and lasting interests of any great nation, than to have any considerable portion of its population dependent on the friendship or policy of colonists or foreigners" (Notes to *The Wealth of Nations*, xxv. p. 601). But free-traders are only not unpatriotic because they leave one of their first principles in the lurch. And being compelled by common sense to make the concession in regard to national safety,

* Various examples of danger to corn supply through war are given by Roscher, *Ackerbau*, § 162, note 5. That modern England, accessible through so many channels, from so many sources, with so great rapidity, and having so much wealth, and credit, and commercial knowledge, is in any danger, is to me not very probable. Elsewhere Roscher notices the advantages to a nation in a protracted war of a certain economical many-sidedness, and that this is an answer to those who say that different States should act towards each other as the different provinces of the same State. (*Principles of Polit. Econ.* ii. pp. 438, 439.)

they can be logically forced to admit that sound political reasons may in any given case forbid free trade. Protection, for example, by increasing the trade between fellow-subjects at the expense of that between subjects and foreigners, may increase the sentiment of loyalty to king or country and of community of interest between different classes and different parts of the country; and may lessen the interest of subjects in the affairs of other States, an interest which may bring national dangers, and incite to national crimes, as when, for the sake of trade, unjust wars are made or justly claimed help is withheld. Again, protection, by affording a secure and steady market, may prevent the emigration, or may cause (especially in countries with little accumulation of wealth) the immigration of masters and workmen, of machinery and various other kinds of durable property. Thus "Swiss labour, and, still more, Swiss capital have been induced by the tariff systems of the great neighbouring countries to settle in Mühlhausen, Baden and Voralberg, or at least to establish branch houses in these places. Similarly Neumark clothmakers were induced to emigrate to Russia, and Nürnberg industrial workmen to Austria" (Roscher, *Principles of Pol. Ec.* II. p. 425). The tobacco factories which sprung up in Canada when a heavy duty was laid on the importation of manufactured tobacco, the raw leaf being duty free (D. McCulloch in *The Fortnightly Review*, May, 1879, p. 760) were probably manned and stocked by persons and with property that but for the duty would never have come to Canada or would have quitted it. And to the piteous tale of the loss to the world's wealth by the unnatural diversion of labour and capital from more to less advantageous employment, let us answer that our care is for the wealth of Austria or of Baden or of Canada, or of some other State, according to our nationality, of some land we love, though the soil be barren, the winter long, though often enveloped in fog or swept by keen blasts, and yet dearer to us than any

Summer isles of Eden lying in dark-purple spheres of sea;
and that we let the world's wealth take care of itself. Or, if any further words are needed with cosmopolitan dollar-hunters, let us say once for all that the distribution of mankind into

nations is a providential ordination, and one of the strongest bonds of union among men ; and that besides other evils its dissolution would induce, betwixt apathy and anarchy, a notable diminution in that very wealth of the world in general about which our opponents are so solicitous.

§ 139. C. Besides the grounds of military defence, national spirit, and national wealth, which in a given case may call for a more or less extended system of Protection, there is a further ground in the need of variety of the national industries. Each State can rightly desire that every principal branch of agriculture and manufactures not forbidden by its soil and climate be practised within its borders, in order to have a variety of occupations to suit the different tastes and capacities of its members, and many fields for the exercise of the national talents. If, therefore, the action of free trade excludes or reduces to insignificance any important branch of industry, as the iron trade, this branch may rightly be protected ; and it is no objection that there must be a corresponding injury to some other branch of industry, the produce of which was being or would be exported in order to procure iron. For our aim is precisely to prevent the exaggerated extension of one industry which implies the depression of another. Moreover, the possibility of a congenial occupation at home may stop the emigration of the young and the enterprising from countries that can ill spare them. Thus over half a million Canadians now in the United States might in great part have remained at home had protection been sooner introduced there, and a choice given them of doing something else than follow the plough (D. McCulloch *l.c.* p. 752). The objection that there is scarce anything absolutely forbidden by soil and climate, and that we are bound to recommend the protection from French competition of British wine made from hot-house grapes, I leave unanswered, as being frivolous, like several other arguments on both sides of this controversy. There is indeed a seemingly serious difficulty in the determination of what is a State or a country. But the question is not incapable of solution. Political science must give us the principles for judging, according to history, geography, language, religion, race and much else, of the groups completely independent

of each other politically, into which it is fit that mankind should be divided ; and also of the nature of the union within each group, from an empire like the British, containing a variety of political constitutions, or a loose confederacy, as of Germany before 1866, to a compact and simple state like Belgium or Greece. And, in addition, we must remember that the larger a protected area the shorter *ceteris paribus* the relative length of the frontier, with consequent saving in the cost of guarding it, and the less chance of the apt physical conditions for any important branch of industry being absent ; * moreover, that any great degree of political independence is difficult to harmonise with a *Zollverein* or customs union. Then each claim for protection for the sake of national culture can be judged on its merits ; and here I will only add against those who forget man's character as a *πολιτικὸν ζῶον*, that, because, as matters now stand, it would be absurd on the plea of promoting variety of industry to protect Boeotia against Attica, or Flanders against Brabant, or Kent against Surrey, it does not follow that it is absurd to protect Ireland or Bombay against Great Britain, or Bavaria against Prussia ; and that, if in these cases protection is unfit, it may still be fit for Victoria or Canada against the United Kingdom, or for Missouri against Massachusetts ; and that, if unfit even here, this does not prove its unfitness for quite independent Powers, as the British, German, French, and Dutch empires against each other.

§ 140. D. Free trade professes to benefit the consumer : but this pretension assumes that the whole human race are in the position and have the technical knowledge of a professional buyer, whereas, not to speak of the liability to be defrauded, many populations in regard to many classes of

* Three districts, each in the form of a square, and containing respectively, 1, 100, and 10,000 square miles, will have for every mile of frontier, the first only $\frac{1}{4}$ of a square mile of inland country, the second $2\frac{1}{2}$ square miles, the third 25 (Roscher, *Principles of Polit. Econ.* ii. p. 440). Naturally countries elongated like Canada, or with irregular frontiers like the German Empire, have fewer square miles to the length of their frontier than compact countries like Spain. For islands far apart Nature herself has fixed the minimum length of the customs frontier, which no union with other countries can lessen. Thus the customs union of England with Wales and Scotland is unlike that with Ireland.

goods (in particular, clothing, furniture, and decoration), are liable to be allured by what is novel, shewy, or apparently cheap, and to prefer it to what is really far more suitable and better for them, as we have already noticed (*sup.* § 115. 124). Such injurious goods may come from abroad, and a protective tariff may be the best method of keeping them away, and of securing the consumption of the better home made goods which else, though preferable, would not be preferred.* Analogous are the prohibitions to import noxious goods, like opium, or books against faith, morals, and loyalty, although such prohibitions are not meant to foster any corresponding home industry.†

E. Free trade in another way may be no friend to the consumer, as it may hinder one of the first duties of good government, namely, to secure as far as possible that the food of the mass of the people be at an uniform and moderate price. For in countries like Hungary, Egypt, and British India, with little accumulated wealth, if there is habitual exportation of grain, the superfluity of good harvests leaves the country instead of being stored within it; and when a bad harvest comes there is not sufficient wealth to attract from abroad a supply of food; while even in the midst of a famine, grain may continue to be exported, as from Egypt in 1833, from Ireland in 1845-46, and from India when millions were starving in 1877-78. Protective laws by favouring home trade at the expense of foreign trade may hinder or mitigate such calamities.‡ They may also check

* "The royal commission appointed to investigate the misery of Spessart in 1852 shew that the home-made clothing had gone out of use there, and that the wooden shoes, so well adapted to wooded countries, had been changed for leather ones. This becoming acquainted with foreign wants in a region not adapted to industries, without a large market, greatly increased the distress. As soon as such a region becomes an independent State, a protective [in the original 'productive,' evidently a misprint] system would suggest itself." (Roscher, *Principles of Pol. Econ.* ii. p. 438.)

† Circumstances can be imagined in which on the principle on 'merces solum importantur sed etiam mores' all foreign trade might be forbidden; but they are circumstances at present of little likelihood.

‡ Let us hear Roscher, *Ackerbau*, § 157: "Complete international free trade in corn would, however, be an unconditional benefit only to nations rich in capital, skilful in trade, powerful at sea. The less developed

the growth of parasitical middlemen interposed between the grower and consumer of corn, and who by their speculations may cause disastrous oscillations, and by their combinations a disastrous increase in the price of corn, or may cause a

would often find that to the advantage of these others their own security of a food supply was seriously endangered. Since in poor countries the price of corn can never rise to such an absolute height as in rich, they have *ceteris paribus* to expect a large exportation rather than importation of grain. If therefore the landowners in Denmark, for example, followed exclusively their own private interest, they would when the crops of Denmark and England had equally failed, send their whole store of grain to England, reserving only enough for their own household or the like. Mehemet Ali in 1833 caused large exportations to be made of corn, although there was actually a dearth in Egypt. So in Hungary since the development of the corn trade, prices have become more fluctuating. At present the whole store of grain can be exported, whereas formerly much remained in the silos [pits for storage of grain]; and to re-import in bad years is much harder than it was to open the silos. A simple mistake on the part of the owners of corn can moreover have the same consequences as well considered selfishness; and usually information on the real state of the harvests, etc., comes much earlier to highly civilized than to backward countries. For a people whose ports are blocked in winter by ice, or where the rivers by their great rapidity make re-importation difficult, the foregoing remarks have particular weight." And he notices, *ibid.* § 158, nt. 6, how in Mecklenburg in 1800 the large exportation of corn, bringing great profit to the landlords, induced a scarcity and then the so-named 'butter revolution'—Orissa is an example of the danger of habitual exportation when there are physical barriers to re-importation. In 1866 food was deficient at the time of year when it could not come by sea, and had to be conveyed by a single road along the whole length of country. (Lukyn Williams, *Famines in India*, 1876, p. 61.) Nearly a million persons perished. But the worst famines that have followed in other parts of British India are not due to physical barriers in the way of bringing in grain, but as in Ireland in 1846-7, to the incapacity to pay for it. Of old there was a local store in each village sufficient for one or two years as well as fodder for cattle. If it is free trade which has caused these stores to disappear free trade has to answer for the death of millions. At any rate the dreadful examples of India and Ireland have shewn the falsehood of the doctrine that free trade, combined with good means of transport, is a security against famine. Adam Smith's reasoning, *Wealth of Nations*, bk. iv. ch. v. (pp. 240, 241, ed. McCulloch), that grain, if there were free trade, would naturally gravitate to the districts most in need of it, rests on the false assumption that the inhabitants of one district are as rich as those of another; when really districts or individuals well fed but wealthy can outbid others starving but penniless.

great divergence between the price of corn and bread. Thus it is said that in France towards the end of 1879 wheat was sold through the combination of middlemen at thirty-four and a half instead of twenty-five francs per 100 kilogrammes, and that consumers of bread had in places to pay a further addition of some twenty per cent. (*L'Association Catholique*, Jan. 1880 p. 78-79).^{*} Only there are other ways besides protection of averting such evils.

§ 141. F. Where the social relations of a country are good and foreign trade small, protection may be a means of preserving the happy existing conditions; whereas free trade may indeed increase the wealth, but also injure the welfare of the country, by breaking up the harmony between master and servant, employer and workman, proprietor and tenant, buyer and seller. This argument can be called protection defended for the sake of an economical constitution. Analogous is the possible use of protection to favour the preservation or growth of small farmers or small manufacturers in opposition to the large.

G. The preservation of a good, or the reformation of a bad, *political* constitution may also be a ground for protection. The matter belongs rather to politics, and is difficult to be discussed apart from the details of each particular case. It is enough to say in the abstract, that the production of certain classes of goods *may* give a particular political character to the producers (*vid. sup.*, § 133); that this political character *may* in a given country be deficient or in excess; and that to remedy deficiency the best method *may* be in protection granted to these producers, while to remedy excess the best method *may* be in protection granted to others. But it by no means follows in history that protection has in this way been applied to redress the political balance of the state; and I think it has been a weapon in the hands of those who conspired against the liberties of Christian Europe.[†] Only this is no argument against its possible use.

^{*} Other illustrations *Christlich-soziale Blätter*, 1879, pp. 195-6, 321, 322.

[†] Those who do not love these liberties naturally view in a different light the conspiracy against them. So Roscher, *Principles of Polit. Econ.* p. 439, says:—"It is no mere accident that in almost every instance

H. Lastly, returning from the moral to the material order, protective duties may be a good means of husbanding national resources by checking that reckless use of them which may be prompted by private self interest. For in the economical no less than in the political order, men can act on the principle *après nous le deluge*. As we have seen (*sup.* § 82-84) the land may be subjected to exhaustive cultivation, the fertilising elements of the soil may be sent clean away, the hill sides may be cleared of forests and not replanted, the fish in the rivers and seas may be extirpated, as well as valuable wild animals on land, and mineral treasures may be prematurely used up, all to the manifold enrichment of the present owners at the cost of the permanent wealth of the nation as a whole. Norway may have one day to lament her present exportations of timber, and Great Britain of coal—where, however, the wastefulness in the home-consumption of coal will be a far graver matter for regret—while it is complained (D. McCulloch, *Fortnightly Review*, May, 1879, p. 750) that Canadian farmers exhaust the land by frequent corn crops, as a home market is wanted for the products of a fit rotation, which are for the most part more or less incapable of exportation. And protection in some form or other may be the best means of checking the exhaustive exportation of bulky raw materials.*

§ 142. Enough, I think, for the purposes of the present chapter has now been said upon the great controversy between free trade and protection; enough, at least, to

those monarchs who humbled the mediaeval nobility and introduced the modern era, [a convenient euphemism !] also established a protective system." Various examples are given in the notes that follow, *ibid.* pp. 442-446, e.g., Louis XIV., Peter the Great, Charles IX. of Sweden, the Bourbon dynasty in Spain.

* The answer to Carey's argument against the exportation of agricultural produce given by Mill, *Princ. of Polit. Econ.* V. x. § 1, is inconclusive, because it assumes that there is no diversity between public and private interest or between permanent and temporary national enrichment.—As a set-off to the danger of drawing much corn from abroad (§ 138) may be reckoned the consequent enrichment of the soil of the importing country. Von Thünen (apud Roscher, *Geschichte der National-ökonomik*, p. 900) suggests that for England there is more security by increasing her 'capital of humus,' than by increasing the area of her land under corn crops.

understand that violent denunciations of one policy or the other as *per se* and of necessity foolish and mischievous, without any regard to the manifold diversities of period, people, and country, are out of place in the sober reasonings of science. Even to say that free trade should be the rule, protection the exception, or conversely, is more likely to mislead than elucidate; and such a vague and general formula does not help us in the complicated discussion needed for each particular and actual case. Let me add two remarks to avert possible misapprehension. First, although I have frequently spoken of protection as a possible or a good means of reaching some benefit or averting some injury, there may be other means as good or better. Thus to prevent exhaustion of forests a good means *may* be a high export duty on timber; but it *may* be as good or better to reach the same end by a wise code of forest laws. Secondly, I do not deny that protection has by no means been confined to cases where it was justifiable, but much rather has often, perhaps more often than not, been used either with stupidity, frustrating its own ends and injuring a more valuable for the sake of a less valuable industry,* or with the unequitable end of satisfying the clamour and cupidity of certain groups—generally of merchants or manufacturers—in the nation, at the expense of all the rest. Only no whit cleaner are the hands of free trade.

And now let us quit not only the discussion of international localisation, but of all industrial localisation, and not only this, but the entire field of the preparation of wealth, which has occupied the present and the three preceding chapters; and let us turn from preparation to enjoyment.

* Examples are given by Roscher, *Principles of Pol. Econ.* II. p. 453.

CHAPTER VI.

ENJOYMENT OF WEALTH IN GENERAL.

Enjoyment as an Art, § 143, 144—Limitation to Enjoyment, § 145—Errors on the Importance and Use of Wealth, § 146—Christian View of Wealth (Necessaries, Luxuries, etc.), § 147—Difficulty because of the actual Inequality of Enjoyment, § 148—Christian Justification of Inequality in Wealth, § 149, 150.

§ 143. The word enjoyment, as already explained (§ 51, 52), can be taken to mean the final and personal use of any sort of good, as opposed to that other use which can be called preparation. But, as in the preceding chapters we have considered, not every kind of preparation, but only the preparation of wealth, so now I propose to consider, not every kind of enjoyment, but mainly and principally the enjoyment of wealth. And, after having got some general notions about the main features and various kinds of this enjoyment, we shall be able to consider its relations to the preparation of wealth (that is, to production), and to examine the momentous balance of revenue and expenditure.

Looking first from the technical point of view which examines what is conducive to some particular end, as distinct from the moral point of view which examines what is right and wrong (§ 4), let us mark the error of thinking all the difficulty lies in getting enjoyable goods, and none in enjoying them when got. In reality, the second process is often more complicated than the first. To make a fit choice among a variety of goods, and a fit use of what is chosen, may be more difficult than to assign the fit crop to each field or to make a selection of merchandize most likely to find customers. Irrational systems of diet, or mistaken courses of medical treatment, have often been seen, where there has been no lack of desire to get the 'best article,' or

of money to pay for it. It may be no easy task, when we are aiming at health, or pleasure, or power, or any other particular end, to assign to each item of enjoyment its proper place and due importance, to decide what proportion of our real expenditure is to be devoted to food, or to dress, or to entertainments, or to our house, or to our travels. Mistakes are made every day. There is a painful deficiency in some goods because, there is a needless abundance in others: too large a house, too many servants, three carriages where one would be sufficient, and where what is spent on the other two might allow the enjoyment of many evenings at the theatre, or days on the moor or by the trout stream. Millionaires may not know what to do with their millions; and to have the skill or fortune to acquire does not imply any capacity to enjoy. The owner of a mining claim in Colorado (described in *The Times*), who had struggled for years to get a livelihood, 'living on beans and bacon and glad to get them,' became possessed from the proceeds of his mine of £50,000 a year; and then 'could imagine no enjoyment equal to that of imbibing wine all day long, and giving others the same pleasure.' Truly an unskilful craftsman in the Epicurean art!*

§ 144. Moreover, there is room for much art not only in putting order among the various elements of our enjoyment, but also in our mode of using each particular enjoyable commodity. Waste not want not is an English proverb; but what English housekeeper has not had to lament the reckless consumption by domestic servants, and the waste of fuel rendered inevitable by the faulty construction of ordinary grates. The care and cleanliness of the Dutch help much to preserve their houses and furniture. And among individuals we see that one man wears out his clothes in half the time that another does. Only there can be excess in care; and the benefit of things lasting longer may be outweighed by the loss of time and temper in our over-careful mode of using them.

Still more important than proper care is the proper appli-

* Schäffle notices that the important subject of the economical arrangement of our requirements has been ignored by Political Economy. *Nationalökonomie*, § 50; cf. § 174-177.

cation of use in common. "There are numberless goods," says Roscher (*Nationalökonomie*, § 207), "which can serve a number of persons either successively or simultaneously, as well as one person separately, inasmuch as the increased use does not require a proportionate increase of the object used. . . . A public library, for example, is far more complete and accessible than ten private libraries which together have cost as much as it. The cook at a restaurant can serve a hundred guests with more varied and tasteful fare, and at a more convenient time, than would be possible if each expended the same sum on cooking at home.* Formerly, only the great could travel quickly; but now this has become possible for the lowest classes by use in common." Mr. Jevons (*Fortnightly Review*, Nov. 1876) amusingly calculates that a private watch costs on an average $\frac{1}{18}$ of a penny for each look, a public clock only $\frac{1}{180}$; he urges public promenades, and rebukes the English ideal of happiness to buy a piece of land and build a high wall round it. In truth, we can perhaps say that joining with others in the enjoyment of wealth is as indispensable to human welfare as co-operating with them in production. But let us never forget that the advantage from use in common only extends to a certain point, and only exists for certain goods under certain circumstances. A thousand guests will scarcely be so well served as a hundred, and of ten thousand many will not get served at all. A dog with many masters will be little pleasure to any of them, nor is it the same thing to a man whether he ride his own horse or a hired one, and all the splendours of the public parks are less to the retired tradesman than the rood of suburban garden which is his own. Individual peculiarities of mind or body often require enjoyment apart or individual use; and our very infirmities, especially in our old age, our whims and fancies, cranks and hobbies, though rightly checked in childhood and youth, and rightly meeting no indulgence in the more perfect life of the

* He adds in a note that "you can get for a moderate price at a first-rate Parisian restaurant the choice between 12 potages, 24 hors-d'œuvres, 15-20 entrées de bœuf, 20 entrées de mouton, 30 entrées de volaille et gibier, 15-20 entrées de veau, 12 de pâtisserie, 24 de poisson, 15 de rôts, 50 entremets, 50 desserts, besides the choice between some 60 wines from France alone. What princely table in this respect could offer more?"

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cloister, ought not for those in the world to be suppressed ruthlessly by a Spartan uniformity. But, above all, as soon as the community of use is extended beyond the limits of the family, a loss of the precious goods of home life may instantly outbalance the seeming advantages of extended community. True, the limits of the family need not be so narrow as in England they commonly are; and we shall have occasion to mark the great advantages, and among them the extended use in common, which accompany large households in contrast with small. But whether the family be a large or small community, whatever lessens its union, peace, and privacy, brings a loss for which even the splendours of the London clubs, or the dainties of the Parisian cookshops, cannot, in the opinion of some, afford adequate compensation.*

§ 145. The limitations of our desires, and of the capacity of goods to satisfy them, have often been observed and are obvious. However excellent the quality of our food, we can only consume a certain limited quantity. A room, a house, or even a garden may be inconveniently large, as well as inconveniently small. To possess a watch is in some stations of life almost a necessity; to possess two may be a convenience; to possess twenty would be a nuisance. For a certain time we can listen enraptured to music or attentive to a tale, or gaze in delight on a picture, or be absorbed in study, or be active in sport: but for a certain time only, and then the pleasure will begin to dwindle away, and sooner or later be transformed into pain. We need variety of goods and interludes in our enjoyment. An illustration of this may be seen in the price of corn reckoned in money or in any other goods. The utility of a certain amount of corn (or of any other staple food) is so great that we are ready to sacrifice almost anything rather than forego it. But when

* Significant are the enthusiastic praises of use in common by Fourier the Communist. Roscher, *l. c.* § 207, note 7, observes how his phalanstères presuppose it. "In these colossal palaces, which in spite of their splendour are cheaper than the hundreds of [separate] hovels which they replace, there is among other things to be held every evening a large ball, since, to begin with, it is cheaper to furnish a large number of persons with light and warmth when they are collected together in one large room."

we have got this and considerably more, there comes a point when any more corn is of so little use to us that we will hardly give anything for it. And, in consequence, we see the price of corn in money rises and falls out of all proportion to the deficiency or abundance of the harvest. Thus, according to Gregory King's 'rule' (Schäffle, *Nationalökonomie*, § 55)—

A deficiency in the harvest of $\frac{10}{30} \mid \frac{20}{80} \mid \frac{30}{160} \mid \frac{40}{280} \mid \frac{50}{450}$ } per cent.
caused rise in the price of corn of

And the estimated total money-price of the French wheat-crop in the three years 1817–19 successively sank, though (or rather because) each year the crop was more abundant.

In 1817 being 48 million hectolitres, valued at 2,046 million francs			
In 1818 being 53	"	"	1,442 "
In 1819 being 64	"	"	1,170 "

(Roscher, *Nationalökonomie*, § 6, note 2.)

But because there are limitations in number, space and time to the utility of goods, we cannot say that with every extension of any given good there is a proportionate diminution in its utility. With some goods there is with every extension, up to a certain point, even an increase of utility. In most circumstances an acre is proportionately more valuable to its owner than a square rood. Wants may grow with the means of satisfaction. "A man with two shirts will try to get a dozen: a man with none will often not care even for a single one" (Roscher, *Nationalök.*, § 221, nt. 1). The appetite can be whetted: *Crescit amor nummi, quantum ipsa pecunia crevit*. Passions, as for coins or old china, grow with each fresh acquisition; and remote, indeed, is the limit when the frantic desire of adding field to field (*furor agros continuandi*) is allayed. We must also remember the different uses of the same commodity, as of water, first for drinking, and thus to a man dying of thirst of as great value as his life; then rapidly with each increase less useful, till there is enough of it to serve for washing, when it will rise in value to him. Then, again, it will gradually lose relative utility till there is enough of it to serve for irrigation; when the larger quantity will again become relatively more useful than the smaller. Similarly, £1,000 may enable me to buy back the

long lost, coveted, paternal homestead, and thus be to me more than treble the utility of £950.* But let us leave these technical calculations, and turn to what is right and wrong in the enjoyment of wealth.

§ 146. Although excess both in theory and practice, in regard to the enjoyment of wealth, has been wide-spread and conspicuous, there are not wanting examples of defect. Certain devotees in India profess that any difference between things is mere imagination, that blows or blessing are alike to them, that filth is as good to eat as wholesome food. With matted hair, blood-red eyes, and bodies naked, except for a covering of dirt and vermin, they go about having a fresh human skull in their hands, from which they have previously eaten the putrid flesh, and into which is poured whatever is given them to drink (J. M. Ludlow, *British India*, I. p. 60. Cambridge, 1858). Diogenes in his tub is a more tolerable example of the cynical scorn of wealth. The Stoics held that corporeal goods were for man not goods at all; as though when man is composed of body and soul, what helps to preserve the life of the body was no good for him (S. Thom. *Sum. theol.* 1^a 2^{ae}, qu. 59, a. 3). And in the Middle Ages were certain heretics who taught that to possess anything even in common was opposed to evangelical perfection. (A confutation can be drawn from *ibid.* 2^a 2^{ae}, qu. 188, a. 7.)

On the other hand, certain economists have praised almost any desire which requires wealth for its satisfaction, because it stimulates men to produce. Their maxim has been to multiply wants in order to multiply products, and the Christian doctrines of self-sacrifice and asceticism are denounced

* These considerations seem to have been overlooked by Mr. Jevons, if, as I understand from the elaborate discussion in his *Theory of Political Economy*, he asserts an universal and progressive diminution of utility with each 'increment of commodity.' And thus I cannot feel convinced when he says that all gambling is in the long run a sure loss, on the ground that a gain of say £50 is less gain than the loss of £50 is loss. Even if we admitted that the commodity got by the winner is on an average less useful to him than it was to the loser, it would not follow that the pleasure of winning might not far outbalance the pain of losing and leave a surplus of enjoyment to cover the alleged deficit, not to speak of the net gain from the delights of the excitement which accompanies gambling.

as impediments to wealth and civilization. Even Roscher seems to approve the detestable practice of giving brandy to savages in order to arouse them to work for the sake of this new gratification (*Nationalökonomie*, § 213), as though this were the only or even one mode of civilizing them, and not rather a mode of exterminating them. And he seems (*ibid.* § 214) to confuse the condition of tribes sunk in savagedom, careless of most of the goods that are needed for a decent life, and yet brutally indulging themselves in a few others that they care for, with the condition of a simple and frugal peasantry having sufficient of those commodities which are the requisite material foundation for a rational existence, and not willing, in order to get more, to sacrifice their peaceful tranquillity, and ancient manners, and well-spent leisure. Although their wants are few and easily supplied, such peasants are separated from the unrestrained, if unskilful self-indulgence of savages, by a greater gulf than lies between these savages and those who abuse wealth in a highly civilized society, whether by their avarice, or ostentation, or sensuality. What is meant by civilization and progress, and whether they are hindered by Christian doctrine and practice, we will examine at the end of this Book. The innumerable excesses in the use of wealth can be better judged when we have examined the right use. Let us here rather notice that apologists or apostles of Mammon-worship are no new phenomenon, but have been seen again and again in periods of moral corruption onward to our own from the time when was written the hideous epitaph of Sardanapalus: "What I possess is what I have enjoyed in feasting, in trampling on my foes, in gratifying my lusts";* or when the arguments set forth in the second chapter of the Book of Wisdom were in common use among the degenerate Hebrews. "The time of our life is short . . . and after this we shall be as if we had not been . . . and no man re-

* Ταῦτ' ἔχω, ὅσ' ἔφαγον καὶ ἐφύβρισα καὶ μετ' ἔρωτος τέρπν' ἔπαθον. Strabo, xiv. 672. See Roscher, *Nationalökonomie*, § 21, note 4. Compare the ghastly epitaph of a Roman slave (*Orelli*, 4816, *apud* Allard, *Les esclaves chrétiens*, 1876, p. 166): Balnea, vina, Venus corrumpunt corpora nostra, set vitam faciunt.—The error that luxurious consumption is needful for national wealth and prosperity will be examined in a subsequent chapter.

turneth. Come, therefore, and let us enjoy the good things that are present, and let us speedily use the creatures as in youth. Let us fill ourselves with costly wine and ointments : and let not the flower of the time pass by us. Let us crown ourselves with roses, before they be withered ; let no meadow escape our riot. Let none of us go without his part in luxury ; let us everywhere leave tokens of joy : for this is our portion and this our lot." Nor in regard to wealth can materialism with any decent shew of logic teach any other practical course. Sensuality, though prudent and refined, is sensuality still ; and as our lifetime is but as a day, we must still exclaim : *Comedamus et bibamus ; cras enim moriemur*. But let us turn from false doctrines to the truth.

§ 147. The Christian religion imposes on all men the duty of self-sacrifice and detachment from the things of the earth, wealth among the rest, for the love of the infinite Good. Moreover it gives as a counsel of perfection, which only a few are to attempt or attain, to abandon the private ownership of anything at all, and the private enjoyment of anything but the mere necessities of life. For the multitude on the other hand a certain measure of wealth, varying much according to circumstances (as time, place, rank), is an useful means towards fulfilling the purpose of their existence. Let us examine this measure.

In wealth as the object of enjoyment we can distinguish the three degrees of what is necessary, what is decent and what is superfluous. The *necessaries* of life (*bona naturae necessaria, le nécessaire, das Nothdürftige*) are the food, the clothing, the shelter, and whatever else is needful to keep us in good health, not merely to lead a starved and stunted existence. That every one should enjoy these is obvious. Secondly, *decencies* (*bona statui necessaria, le bienséant, Anstandsgüter*) are the goods proper to a man's station in life, goods, that is, without which a man cannot decently pass his life according to the condition and rank both of himself and of others he has to provide for (St. Thomas, *Sum. theol.* 2^a 2^{ae}, qu. 32, a. 6). Naturally such goods vary with a man's station, but for the lowest are neither few nor unimportant. A house, for example, to be a fit home for a family, must be much more than the shelter indispensable

for health; and it is unseemly for the lowest class, though health may require no more, to be clad in a shapeless patchwork of rags. And so far is it from being a duty to forego the enjoyment of this class of goods, that it would be inordinate under ordinary circumstances for any one to give away so much of his property that from the residue he could not live decently (*convenienter*) according to his own station in life and the works that fall to his lot. Nullus enim inconvenienter vivere debet.* Thirdly, *superfluities* (*bona naturae et statui superflua, le superflu, das Ueberfluss*) are all commodities not falling under the two previous heads of necessities or decencies. But we should be liable to mistake if we did not further divide superfluities into two kinds, the one to be called *ornaments* or elegancies, the other *luxuries*; the one if not praiseworthy at least justifiable, the other always reprehensible. The line between the two is often fluctuating and obscure; but for all that we can get an adequate notion of each. Goods which serve primarily towards intellectual or aesthetical training, or towards the enjoyment of science, literature, and art, are not to be called luxuries; nor again such commodities as serve to afford ordinary comforts in home life, and to avert fatigue in travelling, and to give amusement within limits which reason in each given case can without much difficulty assign. Moreover on certain occasions of festivity and under other special circumstances, elaborate and costly goods may be enjoyed without blame. In particular where the good is enjoyed in common with other persons there is less likelihood of luxury, more room for ornament, and the more, the wider or more exalted the community, till we can rightly share in the utmost splendour of magnificence and art in the celebration of divine worship.† On the other hand superfluities are to be called luxuries under the following circumstances. (a) When they minister to physical excess as over-eating or drunkenness, or taking

* S. Thom. *ibid.* The exceptional cases for giving up such goods he explains to be where a man enters into religion, or where a speedy reparation of fortune is possible, or where the sacrifice is called for by the extreme necessity of others or by the great necessity of the republic.

† Cf. S. Thomas, *Sum. theol.* 2^a 2^{ae}, qu. 134, on magnificencia.

opium otherwise than as a medicine. Nor does the coarse quality of the food or drink or ought else which serves towards sensual indulgence hinder it from being a luxury. Adulterated gin may be the medium of intoxication as much as the finest cognac from France. (b) Superfluities again are luxuries when there is a disproportion between the sum spent on them and the revenue of the man who enjoys them. In this aspect the same physical object may be a luxury to one man and not to another, in one place or period and not in another; as butcher's meat every day a luxury to the English agricultural labourer but not to the noble peer his employer, nor on the pampas of South America to the very mendicant, being cheaper there than bread; and tea taken morning and evening no luxury now to the poorest class in England, though it would have been 100 years ago. Thus there may be an apparent increase in the indulgence of luxuries, when really there is only an increase in the wealth of the set of persons we are observing, or else a number of commodities formerly costly and rare become cheap and commonly used. (c) Thirdly, superfluities are luxuries when there is a disproportion between the sum spent on them and the result. *Hoc est luxuriae propositum, gaudere perversis* (Seneca, *Epist.* 122). To this class belongs all food of which the main merit is the costliness, not the taste or the wholesomeness. In the Roman empire this folly reached the extremity of drinking wine in which pearls had been dissolved, and eating a dish made of birds that had been trained to sing or talk (Roscher, *Nationalökonomie*, § 232, where other examples are given). Again, personal adornment, as dress or jewellery, when neither graceful nor commodious, nor required by the station of the wearer or the special circumstances of the occasion, but marked with the stamp of mere ostentation or perversity, must be called luxurious, as the ridiculous shoes for men in the fourteenth century more than double the length of the foot, or ladies' trains needing a page to bear them up, and the frequent exaggeration of each fashion as it passes. (d) Finally, all commodities are to be held luxuries which in their preparation or enjoyment must needs under the circumstances of the time and place entail suffering on others;

as dresses or papers of such colour or texture as only to be made by some unhealthy process ; or lucifer matches formerly when the bones of the makers rotted away ; or a hunting ground formed by destroying the homesteads and hamlets of the poor.

Let the foregoing suffice on the difference between luxuries and ornaments as well as between superfluities and decencies, decencies and necessities.*

§ 148. But are not all men equal ? And on what principle is one to have fewer goods to enjoy than another, and to be told that fine houses and carriages, that horses and hounds, that wine or even flesh-meat, are luxuries for him, and only ornaments or decencies for another ? And why should he who labours so much enjoy so little, and another who labours so little enjoy so much ? The question is an old one, and easier asked than answered ; nor, if we dismiss religion, do I know any answer which does not amount to this, that those who have got the good things of this life mean to keep them, and that the others are likely to fall into a still worse plight if they attempt to disturb the unequal distribution. But, after all, this is a mere matter of probabilities, of which one man may claim to be as good a judge as another. History is not wanting in examples, particularly in Greece between Alexander's time and the Roman Conquest, of successful attempts by the poor to seize

* Adam Smith includes under necessities whatever the custom of the country renders it indecent for creditable people even of the lowest order to be without ; all beyond comes under the head of luxuries, which thus would include the *bona statui necessaria* of all classes except the lowest. But I cannot see how *e.g.* the Sunday coat which is *de rigueur* for the London labourer is necessary for him in any sense in which a gentlemanly coat is not necessary for a gentleman. Senior's distinction of necessities, decencies and luxuries (*Political Economy*, ed. of 1850, pp. 36, 37), is much clearer and is well illustrated ; but he should have used some other word instead of luxuries, as this word is marked with a note of moral censure. Roscher's chapter on "Luxus" (*Nationalök.* § 224 *seq.*) is a storehouse of information, but also of error. Like Adam Smith and Senior he misleads by using the word luxury to include many kinds of enjoyment that are quite praiseworthy. His ideal of enjoyment is vulgar and repulsive. His 'facts' have to be squeezed into the strait-jacket of his three fancy historical periods : rude, flourishing, and fallen times (*cf. sup.* § 27).

the property of the rich ; and it is hard to prove to a man who is hungry and ambitious that in his own particular time and place there is no chance of success for a social revolution ; while to argue it unjust, is to insult rather than convince him. He may say that if common labour is really, as we tell him, not a disgrace, but a dignity, he and his fellows are too generous to monopolize this honour, and to forego their share of the burden and opprobrium of easy indolence ; that thrift and self-help, which we recommend to the working classes, are virtues so conducive to the enjoyment of life, that he cannot rest as long as any class is exempt from the necessity of practising them ; that as no one is responsible for his own existence, and no one should be punished before he has done wrong, it is unjust and absurd as well as pernicious for one youth to begin life with a large fortune, another with little or nothing, instead of all starting fair in the economical race ; that, in short, inevitable sufferings and death are quite enough to endure without adding to these evils by the almost incredible stupidity and injustice of laws which can assign to one of two infants ten thousand a year, to the other not the fraction of a farthing. He may speak like this, and, on the hypothesis of Rationalism, we cannot meet him with any solid argument from justice or expediency. We must fall back on the gallows.

But that hypothesis is false ; and in Ethics, of which Economics is one portion, the right method (*sup.* § 12, 32) pays much attention to theological teaching ; nor is it impossible, provided theology is our helper, to obtain for the question before us an answer that is sufficient.*

§ 149. Poverty as well as much other suffering has become because of the Fall the normal heritage of man ; but because of the Redemption has become also capable of being expiatory, medicinal, and meritorious ; affording, if rightly used, the means of making satisfaction for our debt of punishment, of subduing our passions, of exercising charity, that may rise to be heroic, towards our brethren, living or dead, of acquiring for ourselves merit that will last for

* In some of the foregoing remarks I have followed Bishop Ketteler *Arbeiterfrage*, p. 40 *seq.* 124 *seq.*

eternity. Instead of envying the rich, the poor man has to be thankful that he is not burdened with a terrible responsibility, and that for him it is easier to escape the triple danger of being absorbed by cares, and enamoured of riches, and swollen with vain glory (S. Thom. *Sum. theol.*, 2^a, 2^{ae}, qu. 188, a. 7; qu. 186, a. 3). He can think how this life passes like a shadow; how eternal goods are alone worthy of man's nature; how a just Judge will one day assuredly make up for every inequality; how the rich man may sink into hell, while angels bear Lazarus into Abraham's bosom. Many pages might be filled with the advantages and the glory of holy poverty; and in short the difficulty is not so much how the poor are to rest contented in their poverty, as how the rich can endure to live in their abundance. But they can, and with reason; for they are no accident or abnormality, but have a providential mission in society and the possibility of securing for themselves in the midst of their riches the blessings of poverty. And as follows.*

It lies in the order of Providence that art and literature and philosophy should bloom, and that man should subdue the earth in a double sense: materially by the spread and improvement of the industrial arts; intellectually by the development of the physical sciences. But without inequality, nay great inequality in fortunes, there would have been little progress perhaps in any of these departments. How would painting, for example, have fared without a wealthy class to serve as its patron? And though, in the abstract, mechanical inventions and division of labour and production on a large scale are possible in a society where no one is richer than his neighbour, how little in fact would they have been developed, if there had been no rich men to make use of them, and if they had not served as a highway to wealth for a fortunate few. It is indeed obvious that the accumulation of material goods in the hands of one man allows him to accumulate also immaterial goods, to develop his intelligence, to refine his taste, to become in a word a man of culture, all his natural virtues trained to blossom and bear fruit. He stands there with the external goods of wealth

* Much that follows is taken, sometimes word for word, from Périn, *De la richesse dans les sociétés chrét.* II. p. 456 seq. 2nd edit.

and power and the internal goods of prudence and politeness, of learning and good taste; nor can there be any doubt of his superiority to the rude and toiling multitude. But then let there be no mistake as to the nature of that superiority. He too is fallen, and all these goods of his are but as dust in the balance if weighed against a single supernatural act; and himself liable to terrible punishment if either he set his heart on them or fail to use them aright. But use them aright he can; and by voluntary sacrifice can conform to the general law of suffering and poverty, and make his wealth and culture a pathway towards God. For in obedience to the injunctions of Christian charity (in the wide sense of the term) he can turn his wealth and capacities to the service of his fellow-men in various ways like the following.

§ 150. First, he may use his personal capacities in filling well various offices more or less important of Church and State and society in general, labouring in theology or philosophy, in art or literature, in the mathematical or physical sciences, in the higher departments of the teaching and healing arts, in the higher posts of the law and of civil or military service. In particular, unless the higher functions of central and local government are to be ill performed, there is need of a rich class able to labour without pay, or at least not dependent on their pay for their livelihood, lest the State become the prey of society's refuse, of lawyers without clients, and doctors without patients, and teachers without pupils, and tradesmen without customers, and artisans without work.* Secondly, in the industrial world the rich man, or rather any one with even a moderate endowment of wealth, can exercise what has been called Christian patronage, that is, a fatherly care over all his workpeople, servants, tenants, and dependents of any sort: admitting them as far as their condition allows to fellowship in literature, science, and art, giving them leisure and at the same time the means and the motives to use it well by removing temptations and by providing abundance of wholesome means of recreation and every facility for their religious life.† Thirdly, by generous contributions

* Cf. Roscher, *Nationalökonomie*, § 205. Only the reader must know how to separate the wheat from the chaff.

† Cf. the following passage from an article on 'London Poor and

towards means of common enjoyment, as public buildings, galleries, gardens, pageants, and above all, the fabrics and ceremonies of religion, that these may be seemly at least, and if possible magnificent, the rich man may share his riches with the poor, and brighten the dulness of their lives. Lastly, by charity, in the narrow sense of the term, he can spend himself and his goods in the service of those in distress.

Let us mark that these four ways, in which the rich and cultured can fulfil their mission, are by no means only for the most opulent class, but that every man in proportion as he is raised above others in riches or culture, though only by a little, is bound to use these advantages in some such way.* And then it is plain that in Christian societies the inequalities of property are not a cause of social discord, but of union, binding together the various members of the commonwealth, and hardly deserve the name of inequalities because the occasion of such abundant compensation. Nor do I think, provided the great majority of the people have at least the

London Work,' in the *Dublin Review*, July 1874, p. 46 : "On a Christian view of the case the rich are stewards rather than owners of these possessions ; the stewards, not to dole out to their workpeople portions of broken meat and bread, and cast-off clothing, or fractions of elementary teaching to suit their own views ; but to stretch out a hand to those whom they employ, and lift them up to the fullest advantages of which their life allows. To help them, in short, first to possess and then to enjoy, in their degree, all the pleasures and gifts which they themselves possess and enjoy in a wider measure. The leisure to read, and what to read ; the eye and ear for beauty, and the uses to be made of beauty ; the desire for cleanliness, neatness, and adornment in easy, simple ways and materials. The desire and then the habit of making home bright, attractive and pleasant, and of centering there the useful and agreeable occupations of the family, in which the father, mother, and children can take their parts. The cultivation of music, drawing, wood-cutting and carving with this end ; the communication of free, simple, good breeding, gentle manners, speech, and laughter, and simple good taste in dress, and house furniture, and colours ;—all these benefits are due from the rich to the poor, or, as it is now expressed, from capitalists to labourers. If they were bestowed . . . we should not . . . see the two great divisions of society drawing apart . . . preparing for strife."

* In extreme cases, and thus *per accidens*, a man may be bound to give up the ornaments and even the decencies of life to help the extreme necessity of another.

decencies (*bona statui necessaria*) of the lowest class (*sup.* § 147), and provided the principles of Christian charity prevail, that we can prove any one sort of distribution of wealth will enable men, better than any other, to fulfil the purpose of their life.

CHAPTER VII.

FOOD AND DRINK.

Particular Kinds of Enjoyment : Food, § 151—Five main Divisions of Food, § 151-156—Causes of the Diversity of Habits regarding Food, § 157—Examination of the Cost, Security, and Fitness of different Kinds of Staple Foods, § 158, 159—Drinks : Waters and Water Supply, § 160-162—Aromatic Drinks, § 163—Fermented Drinks, § 164, 165—Right use of Alcohol, § 166, 167—Abuse of it in the Past and the Present, § 168-170—Legislation against Intemperance, § 171-173—Modern Temperance Associations, § 174—Conclusions concerning Intoxicating Drinks, § 175, 176—Suggestions for Modern England in Particular, § 177-179—Concluding Suggestions and Remarks, § 180.

§ 151. From the enjoyment of wealth in general let us turn and look at the enjoyment of particular kinds, as food and drink, dwelling-place and pleasure garden, theatres, law courts, churches. We are not primarily concerned with that sort of enjoyment, of which the object is primarily not a commodity but some personal service, for example, the service of one's comrade in a game, of one's companion in an excursion, of an actor or singer, of a doctor, or teacher, or lawyer, or priest. But in so far as such services entail expenditure, we must in this aspect consider them, in order to obtain a sure basis for the calculation of revenue and expenditure. And I must ask indulgence for the irregular and fragmentary character of what is to follow, excusing myself, as best I can, by pleading the little to be found on these matters in ordinary treatises on 'Political Economy,' as though the making of a flute was so much more worth the attention of statesmen and philosophers than the playing on it or the listening to it. In much I follow the eleventh

chapter of Le Play's *Ouvriers Européens* (2nd ed. 1879), to which once for all I can refer.

Of all the elements of enjoyment, food is the one which has been and is for most men the chief source of expenditure. "Countries are populous," says Adam Smith (*Wealth of Nations*, Bk. I. ch. xi. Part II), "not in proportion to the number of people whom their produce can clothe and lodge, but in proportion to that of those whom it can feed." And statistical observations sometimes allow us to express in figures and with some approach to accuracy the large proportion of the entire expenditure made up by that on food. The following table from Engel, though old and well known, will serve as an illustration (Roscher, *Nationalökonomie*, § 214, note 7). It refers to Saxony in mid nineteenth century:—

Item of Expenditure.	Average relative expenditure on each item		
	by a well-to-do workman's family.	by a middle-class family.	by an upper-class family.
Food and drink .	62 per cent.	55 per cent.	50 per cent.
Clothing	16 "	18 "	18 "
Housing	12 "	12 "	12 "
Fuel and light .	5 "	5 "	5 "
	<hr/> 95 "	<hr/> 90 "	<hr/> 85 "
Education . . .	2 "	3·5 "	5·5 "
Public security .	1 "	2 "	3 "
Health	1 "	2 "	3 "
Personal services .	1 "	2·5 "	3·5 "
	<hr/> 5 "	<hr/> 10 "	<hr/> 15 "

And many other tables might be constructed that would shew the prominence of food and drink in the domestic budget of the poorer classes.*

An elaborate definition of food belongs to physiology not to Economics, and for our purpose it is convenient to separate food from drink. Let us call by the name of food any solid that we eat, provided it is not a narcotic or a medicine, and

* Many tables of revenue and expenditure of workmen's families are to be found in Le Play, *Les Ouvriers Européens*, vol. ii.—vi., and several

any liquid that we drink, provided nutrition is its main purpose (*cf.* Dr. Edw. Smith, *Foods*, 3rd ed. pp. 1-2). Opium, therefore, and pills, though solids and eaten, are excluded; whereas milk and broth, though liquids, are to be classed among foods. Further let us call by the name of drink

in Appendix II. to Bishop Ketteler's *Arbeiterfrage*, Mainz, 1864, whence I select the following:—

Annual expenditure of a workman's family of five persons in Holstein about 1847. (Ketteler, *l.c.* p. 199.)

Item.	Thalers.	Silbergroschen.
Food	150	24
Fuel and light	8	15
Washing, sweeps, utensils, watchman, sick and burial club	4	15
Clothing and bedding	16	17½
Dwelling-place	14	
Taxes, school and church fees	7	
Total expenditure	201	11½

Annual expenditure of an ironworker's family of six persons in Derbyshire about 1850. (Le Play, *l.c.* III. pp. 416-419.)

Item.	Francs.	Centimes.
Nourishment (food, 1,145f. 74c.; tea and coffee, 194f. 40c.; beer and spirits, 192f. 8c.)	1,460	94
Habitation (including fuel, 66f. 4c., light and fur- niture)	229	93
Clothing and washing	207	64
Church, school, doctor, recreation (tobacco, 33f.)	81	44
Taxes and insurances	25	70
Total expenditure	2,005	65

Hermann, cited by Roscher, *Nationalökonomie*, § 1, note 2, reckons the annual requirements of the Bavarian people at 177 million florins for food, 60 for drink, 50 for clothing, 45 for dwelling, and 37·5 for firing. The difficulties in making such calculations at all accurate are very great. We must, for example, first of all agree as to the method of reckoning, whether in particular we are to give only the *net* revenue and *net* expenditure (*vid. sup.* § 56, 57), or whether we are to add other items to both sides of the account. I think it is desirable to keep strictly to the net revenue and net expenditure; and thus I have struck off from the table concerning the Derbyshire ironworker the sum of 3 francs 20 centimes interest paid for a debt; for such payments must be deducted before net revenue is reckoned. But these matters will find their place in a subsequent chapter.

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every liquid drunk by man, provided it is not a medicine, nor chiefly a means of nourishment. Water, therefore, wine and tea are to be classed among drinks, not among foods; and even cocoa and beer, though both of these contain much nutritive material. Having thus distinguished food from drink, let us examine the one in the first part of this chapter, and the other in the second.

§ 152. To avoid being lost in vain generalities about food we must attempt a rough survey of its chief varieties, which can perhaps be comprised with sufficient accuracy for our purpose under five heads.* Other divisions suitable for works on chemistry or medicine, as into nitrogenous and non-nitrogenous foods, would be of less use for us, and thus in Economics would not be more but less scientific.

First, staple vegetable foods, meaning by staple the chief article or one of the chief articles of diet. And this, if vegetable, may be in the shape of the grain of cereals, or the fruit of trees, or their pith, or bulbous roots, or the seeds of leguminous plants. Among *grains*, the first place in dignity, though not in general use, is held by wheat, which is the staple food in England, in the central zone of Europe and in parts of North America, and is often the food of the rich (as in North Italy), while the poorer classes use some other food from preference or necessity. Lacking the historical and religious associations which belong to wheat, three other grains surpass it in the number of human beings they support, namely, rice, maize and millet, forming between them the staple food of perhaps more than three-quarters of mankind. Statistics of population and consumption are not forthcoming to shew which of the three is most used. The various kinds of millet (its two genera are *Andropogon* and *Sorghum*) reign over much of Africa, Hither Asia, and the larger half of India; maize or Indian corn prevails in much of North America, in Southern Europe, and in Northern China; it has in various regions taken the place of wheat, or barley, or millet, and in

* I have been guided by Le Play's work already referred to, and also by P. L. Simmonds, *Tropical Agriculture*, London, 1877; F. J. F. Meyen, *Outlines of the Geography of Plants*, Supplement, Engl. tr. London, 1846; Edward Smith, *Foods*, 3rd. ed. 1874 (International Scientific Series).

America has even invaded our language and appropriated to itself the ancient word 'corn'; rice prevails in South-Eastern Asia, in much of the Indian Archipelago, and in Southern and Central China, and seems whenever it can be got equally cheap to be preferred to any other grain. Far below these three grains in the number of men they support and even below wheat are two other cereal plants, namely oats and rye, which yet in places are of prime importance, oats in high latitudes and high altitudes, as Scotland, Scandinavia, Thibet, and the highlands of China; rye in Germany and Russia. Buckwheat and barley may close the list of grains, the latter rarely a staple food, and sadly fallen since the days when it fed perhaps half the population of ancient Egypt and Assyria, Italy and Greece; being now mainly used to supply man not with food, but with drink.

Among *fruits* three stand out of conspicuous value as a staple food, the date, the cocoanut, and the banana. The date palm, the king of trees, with its majestic beauty and innumerable uses, is the support of millions in North Africa and South-West Asia, and perhaps is more indispensable to making habitable the region where it grows than any other plant to any other region. The cocoanut palm affords a staple food in Ceylon and the Maldivé and Laccadive islands; the banana tree or plantain (the two are sometimes distinguished) in tropical America, and the West Indies. Less important are four other fruits used as staple food, namely, the Spanish chestnut in Corsica and parts of Italy and France, the Brazilian pine nut or Juvia among the Indians of Southern Brazil, the palmyra palm in the North of Ceylon, and the bread fruit in the South Sea Islands.

The *pith* of a tree in two notable instances serves for the staple food, namely the pith of the sago palm in the Eastern portion of the Indian Archipelago, and secondly, in some of the northern parts of South America, the pith of the *Mauritius* palm, sometimes called the sago palm of South America.

Among bulbous *roots* three at least can be classed among staple foods: the potatoe is the chief article of diet in Ireland and in its own native home among the Quichuan Indians of South America; the root of the manioc, besides being used to make tapioca, yields a flour which is the staple food in

much of Brazil ; the yam in Celebes and in some other of the poorer regions of the Indian Archipelago.

Lastly, the *seeds* of leguminous plants have often served as a principal article of food. The mess of pottage for which Esau sold his birthright was made of lentils ; a kind of bean serves as a staple food in parts of India, Brazil, and Mexico ; and by a curious change stewed beans (*ful*) are the national dish of the modern Egyptians, whereas by the religion of the ancient Egyptians precisely this vegetable was prohibited.

§ 153. The *second* division of foods can be expressed by the alliteration fish, flesh, and fowl, and is pre-eminently for pleasure, while the first division is for necessity. For a fraction indeed, though a small one, of the human race the principal sustenance is the flesh of animals, the flesh of oxen and sheep for example among the richer classes of parts of Northern Europe, England in particular, and among all classes in the country round Buenos Ayres, while in China pork and chicken, including eggs, may claim as well as river fish to be staple foods for the rich ; sea fowl (solan geese) were formerly the main food in the Hebrides (*Fraser's Magazine*, April 1878, pp. 457-8) ; river fish, fresh in summer, dried in winter, is the staff of life on the river Tarim in Central Asia (Prejevalski, *From Kulja to Lob-nor*, pp. 109-110), and sea fish side by side with rice for many of the Malays and Japanese, and without a rival among many fishing villages of Europe. Still, in the main, butcher's meat and game, fish and shell-fish, poultry and eggs, are delicacies, of which up to a certain point a man will be likely to consume more the larger his revenue. A rich Englishman does not eat more bread, a rich Burmese more rice, than his poorer neighbours, but the one more meat than they do, the other more fish. And this division of food, which, mark, does not include the fat or milk of animals, but only their flesh, does not seem necessary for a race of men attaining great and perhaps the utmost physical strength and health ; as is seen from many examples, as the Chilian miners, the boatmen of the Nile, and many stalwart peasants in France, Italy and Spain.* But whether

* In the *Encyclopædia Britannica*, 9th ed. s. v. *Dietetics*, p 202, Dr. Chambers refers to a case where Sicilian navvies, having previously worked slackly compared with the English navvies, who spent much on

any literary class has ever been seen which used no flesh, and whether, if not essential, it is not conducive to intellectual development, and whether its use can be wisely foregone altogether by a race or a class long accustomed to it, are questions which an unprejudiced enquirer will not find it, I think, difficult to answer. And the amiable sect of vegetarians, if they tell us our teeth prove us to be neither herbivorous like oxen, nor carnivorous like beasts of prey, but frugivorous like apes, having, that is, the fruits of the earth as our natural food, forget that man is more than his body; that history has as good a claim as anatomy to say what is natural to him; that apes, as a fact, are exclusively frugivorous, man, as a fact, is not; that unlike them he possesses the art of cooking, and is thus able, in spite of his teeth or his abdomen, to be omnivorous.

meat, whereas they saved much of their wages, became far more efficient workers after the contractor paid half their wages no longer in money but in meat. But such cases prove little unless it could be shewn that the previous *quantity* of food was not insufficient, and that an addition of some other food would not have had an equally good effect. In the same article are to be found some of the results obtained by Dr. Franklin on the comparative value of different foods as a basis of muscular exertion. The following table (*L. c. p.* 210) gives the respective weight of different kinds of food which has to be taken daily to sustain life, or (as the equivalent) to produce muscular force which would raise a man of 10 stone 10,000 feet.

Food.	Weight in Pounds.	Price. s. d.	Food.	Weight in Pounds.	Price. s. d.
Cod liver oil . . .	0'55	1 11½	Bread	2'34	0 4½
Beef fat	0'55	0 5½	Lean ham (boiled) .	3'00	4 6
Butter	0'69	1 0½	Mackerel	3'12	2 1
Cocoa nibs	0'73	1 1½	Lean beef	3'53	3 6½
Cheshire cheese . .	1'15	0 11½	Lean veal	4'30	4 3½
Oatmeal	1'15	0 3½	Potatoes	5'06	0 5½
Arrowroot	1'28	1 3½	Whiting	6'36	9 4
Flour	1'31	0 3½	Apples	7'81	0 11½
Pea meal	1'33	0 4½	Milk	8'02	1 8
Ground rice	1'34	0 5½	White of egg . . .	8'74	4 4½
Isinglass	1'37	22 0½	Carrots	9'68	1 2½
Lump sugar	1'50	0 9'	Cabbage	12'02	1 0½
Hard boiled egg . .	2'20	1 2½			

I have rearranged and slightly abridged this table. The prices in money are naturally only approximate and provisional.

But though the human race is omnivorous, individuals, according to religion, or race, or climate, or various other circumstances, are affected with antipathies more or less violent to certain kinds of food. Even farinaceous foods can be the object of antipathy. The poor Irish in English workhouses feel bitterly the change from a diet of potatoes to oatmeal porridge; a common Englishman is (or till recently was) avowedly prejudiced in favour of white bread, and hostile to the black rye bread of Prussia and Russia, thinking its use must be due not to preference or economy but to misery (Roscher, *Ansichten*, I. p. 257). The use of beans has been restricted by religion among the Egyptians of old, by philosophy among the Greeks, by prejudice among ourselves. But in regard to the flesh of animals, antipathies are more violent and conspicuous. Pork is an abomination to the Jews, to the whole Mahometan world, and to some who are neither Jews nor Mahometans; but is the favourite food of the Chinese and of certain classes in Europe; for mutton, the standing dish of Mahometans, the Chinese do not care, neither for beef; and the sight of an Englishman devouring his favourite beef is to Hindus unutterably repulsive. To an Englishman in his turn it is unpleasant to hear of Parisians eating horse-flesh, Chinese eating dogs, cats and rats, and of the ancient Romans delighting in dormice as a special delicacy.

§ 154. The *third* division of foods can be entitled oleaginous or fatty substances, and, unlike the second division, is in some form or other indispensable. It comprises three principal subdivisions: first, the milk of various animals (as sheep, goats, mares, or cows), and preparations from milk (as butter or cheese); secondly, fat in various forms (as lard, suet, or blubber); and, thirdly, oil from animals or plants. All over the world milk is man's chief nourishment in his early years; and not seldom we see an adult population using so much of a fatty substance that it becomes a staple food for them, blubber, for example, in the polar regions, and milk, including the preparations from it, in the highlands of Tibet and Kurdistan, of Scandinavia and the Alps, and on the pasture lands of Arabia, and those bordering the Great Sahara. The average daily

consumption of milk by each person has been reckoned in some of these instances to be from four to seven pints.

In the use of fatty substances the differences according to people, period, and place have been almost as striking as in the use of flesh; and we can perhaps discern throughout the world a latent hostility between butter and vegetable oil. One extreme is in China, where milk is not used in any form soever, and rape oil is in consequence in great request (Captain W. Gill, *The River of Golden Sand*, London, 1880, I. p. 245); the other in countries like England, where milk and butter and cheese are universal, vegetable oil hardly used at all as food, and to many an object of disgust.* In the middle are countries like Italy, where goat's milk and cheese are used as well as olive oil, but not butter, to any great extent. Another contrast is in the kind of animal kept for milking. In Homeric times it was the ewe and the she goat that furnished milk, not the cow; and to this day in the South of Europe goat's milk holds the first place, while in the North of Europe it is of little account compared with cow's milk. Moreover butter in the form familiar to us, and the delight of the Teutonic and Celtic world, is very different from the fluid butter of the ancient Thracians, to whom the Greeks gave the title of *βουτυροπάγοι* (Grote, *History of Greece*, VIII. p. 102, 4th edit.), and of other 'barbarians' in Lusitania, Ethiopia and India, as well as that which now is *drunk* by the Beduin Arabs or, mixed with tea, by the Tibetans. The art of making butter clean and firm was perhaps discovered by the Finns, who to this day are good butter-makers, in contrast to the Slavonians and Lithuanians, and transmitted from the Finns to the North Germans, and from them to North-Western Europe (Hehn, *Kulturpflanzen und Haustihere*, pp. 91-95). As to the fat of animals its use or disuse varies with that of the flesh.

§ 155. The *fourth* division of food can be called condiments, of which the chief can be comprised under the five heads of salt, vinegar, spices, honey and sugar.

* The striking contrast in a number of points, food among them, between the Chinese and their Tibetan subjects, is well set forth by Captain Gill in the excellent book of travel just referred to.

Salt is the most wide-spread, and has been so in all historical times. The evidence of language indeed may point to a time when the use of salt was unknown among the Aryan race, and also among the Finns ; * and Sallust tell us the Numidians were without it (*Fugurtha*, 80, 7) ; but for the mass of men it has become a necessary of life, and thus has played a great part in history, being an occasion of commerce, and also of wars, and being a favourite object of taxation, where revenue has held the first place in the eyes of the government, the well-being or contentment of the poorer classes only the second. The use of salt as man's food is twofold, one to be a condiment in the strict sense, the other to preserve provisions. The first has been less varying than the second, and is little likely to decline ; whereas the use of salt provisions has varied greatly with the arts of production and habits of life, and at present has lost much of the importance it had when from the difficulty of keeping cattle through the winter no fresh meat was to be got then except game ; when fish was wanted all through Lent, and every Friday, and in no inland region was any fresh fish to be got at any time except river fish ; when voyages had not been shortened by the use of steam ; and when ice was as yet unused to keep provisions fresh.

Vinegar, and other vegetable acids, although not necessities, are of great benefit. They fail to receive their due in England, whereas the receipts of Cato shew their use among the lower classes of Italy in his time, and in Russia a convict receives every week an allowance not only of 28 grains of horseradish, 28 grains of pepper, and 10½ ounces of salt, but also 26½ ounces of vinegar. (*Encycl. Britann. l.c.* pp. 212, 213.)

Spices must not be judged from the little that is wanted of them ; for even in modern Europe that little is wanted much ; and in medieval Europe pepper and other spices were one of the foundations of cookery ; while chillies (or the fruit pods of capsicums) are almost as necessary as salt in hot countries, especially where the insipidity of a

* See Victor Hehn, *Das Salz, eine kulturhistorische Studie*. Berlin, 1873, p. 16 *seq.* In some of what follows I have borrowed from this erudite monograph.

diet of boiled rice has to be counteracted. Thus immense quantities are consumed in India and Burma. And spices have played a great part in the history of commerce, because their use has been so wide-spread, the region of their production so narrow, and themselves so easily transported.

Honey has outlived its greatness, and if still in great use in Russia and Scandinavia cannot hope to escape long the dominion of its two foes, the cane and the beetroot. Of old the woods furnished honey, and in historical times the Carpathians clad with a forest of primæval lime trees yielded an immeasurable supply. Then came between Homer and Hesiod the discovery of bee-keeping (Hehn, *Kulturpflanzen*, pp. 64, 65, 425), which grew to be one of the main branches of rural industry; and honey continued in great use in Europe till its place began to be taken first by sugar from across the seas, and then in this century by sugar prepared at home from beetroot. On honied drinks I will speak when we come to the consideration of drink.

The use of sugar is now almost as prevalent as that of salt. In the remote East it had been extracted from the sugar-cane from time immemorial; but was scarcely used or known in the West of Asia and in Europe till the thirteenth century. Then it began to spread westward; the sugar-cane before the close of the Middle Ages was cultivated in Europe; and in the sixteenth century was transplanted to America. Then colonial sugar-planting began, and has lasted to this day, unfolding some of the darkest pages in the history of man. The consumption of sugar by Europeans kept increasing, and in recent years, in connection partly as cause partly as effect of the vast use of hot aromatic drinks, has advanced with giant strides, as well as the new industry of extracting sugar from beetroot.* In the British Islands 900,000 tons of sugar are

* In the German Zollverein the consumption of sugar in 1834 averaged 2½ lbs. per head, in 1865 more than 9 lbs.; the average in France for the years 1817-1821 was 1·33 kilogrammes, in 1865 it had risen to 7·35 kilog. (Roscher, *Nationalök.* § 229). In the United Kingdom, during the four years beginning with 1861, the raw and refined sugar retained for home consumption reached an annual average of about 36 lbs. per head; in the four years ending with 1879 it reached about 63 lbs. The imports of sugar amounted in 1861 to nearly 12 million cwts.; in 1879 to

said to have been consumed in the year 1875, and it can hardly be denied the title of a necessary of life.

§ 156. The *fifth* and last division of food may be taken to include all vegetable produce that is neither a staple food, nor a vegetable oil, nor a condiment. I will not attempt any catalogue of this miscellaneous division, but only mark a few leading heads. The staple vegetable food of one country or class may be the supplementary food of another. Thus in England in various shapes we consume, as supplementary to our main diet, potatoes, oatmeal, beans, maize, sago, rice, and dates, all of them being in some places a staple food. Thus too in the East Indies bananas are merely used as accessories to diet, not as one of the principal articles. Another and perhaps the chief head of supplementary vegetables comprises fresh fruit and green vegetables eaten raw as salad, or cooked. Food of this sort in some shape or other is more indispensable than flesh meat or fish, and its absence may result in the dreadful disease known as scurvy. The particular sort of green stuff or fruit naturally varies much with climate and circumstances. One of the best friends to Europe has been the humble cabbage, the first of pot herbs according to the elder Cato, who describes its kinds and uses (*De re rustica*, 156, 157). In the South of Europe, especially in Bulgaria, the consumption of melons, water melons and pumpkins is enormous. In the far North the abundance of whortleberries, wild strawberries, wild raspberries and such like fruits, makes some compensation for the absence of orchards. It is equally characteristic of England, the land of great cities and innumerable traders and unrivalled means of communication, that the national fruit, the favourite of the common people, has come to be the orange, brought across the seas from afar. Less im-

over 21 million cwts.—The following figures from P. L. Simmonds, *Tropical Agriculture*, p. 218, shew the tons of beetroot sugar produced in the five chief producing countries at two different periods.

Year.	France.	Zollverein.	Belgium.	Year.	Russia.	Austria.
1850	67,000	45,000	5,800	1860	87,000	76,000
1875	500,000	346,000	80,000	1875	245,000	154,000

In comparison with cane and beetroot sugar the production of maple, date, and sorghum sugar is insignificant.

portant than green vegetables and fruit are roots like carrots and turnips; which, however, can be a useful addition to diet; and their introduction into England in the seventeenth century is said to have extinguished leprosy and scurvy both by their use as food for man and also by enabling fresh meat to be got in winter by affording a winter food for cattle (Thorold Rogers in *The Contemporary Review*, April, 1880, p. 681). On the use of seaweed I have already spoken (*sup.* § 64); mushrooms, unknown in some regions, are to the inhabitants of the Ural mountains much what potatoes or cabbages are to us in England. It only remains to speak of one more head of supplementary vegetables, those namely that are called alliaceous, as onions, leeks and garlic. Of old they were a favourite with the Egyptians, and the Israelites sighed after them in the desert. They are the delight of Western Asia, and of the common people in Russia and in Southern Europe, as long ago of Greek and Roman plebeians. But the odour which is the penalty of eating them has made them the aversion of delicate nostrils and nerves and has given them a conspicuous place in comic literature. The aversion to their odour or to extreme forms of it is perhaps not confined to the classes reared in delicacy, but may be wide-spread. It has been said that the onion-smelling breath of the Russians is a bar to any social intercourse between them and the Germans; and that the legend of a *foetor judaicus* clinging to Jews had its origin in their universal indulgence in alliaceous vegetables.*

§ 157. After the foregoing survey it is natural to ask the reasons for the great diversities, actual and historical, in the kinds of food in common use. An answer in detail would occupy many hundred pages; let it suffice to give a summary of the two chief sets of reasons; first, those of production: the geographical distribution of plants and animals, the capacity of the land for receiving and acclimatizing them, the knowledge of how to grow or breed them possessed by the inhabitants, and the skill to prepare them for the table; secondly, reasons of enjoyment: the different

* An interesting account of these plants, historical, philological, and literary, is given by Hehn, *Kulturpflanzen und Haustiere*, pp. 122-133.

proportion of various chemical elements required in food according to climate, habits of life, age or constitution, the pleasantness, greater or less, of the taste of different foods, the amount of revenue that each man can dispose of for supplying himself with food, and the knowledge possessed by the inhabitants of how to enjoy the animals and plants at their disposal. These two sets of reasons are enough to account for many of the great differences seen in the diet of different periods, regions, nations, classes, and individuals. But there may be other reasons. Taxation, by pressing unequally on different sorts of food, may increase the consumption of one and lessen that of another. Religion may affect consumption by forbidding some kinds of food at certain seasons, or altogether; and the grounds for such prohibitions may either be clear, as for those of the Christian religion, or obscure. Moreover, sometimes we are at a loss for any sure explanation. Thus the wide-spread antipathy to horse-flesh may, by conjecture, be ascribed to a kind of reverence for the horse as our helper in war and the chase, as being so useful as a draught animal, and as exhibiting a sort of image of nobility and manliness; a high regard for the ox, as being so invaluable for agriculture, may account for the antipathy to the flesh of oxen among the Chinese, who, unlike the Hindus, do not abstain from it on religious grounds. But these are only conjectures; and although history and physiology may help to explain much in regard to the use of food, we may often have to rest content with the saying, there is no accounting for tastes.

But although the food of man has been so various, I think we can gather from observation that it has been of a suitable kind among the mass of mankind historically known to us, that a wholesome diet has prevailed among them, not necessarily the best under the circumstances, but a good one. The arts of cattle-breeding, agriculture, cookery, and dietetics, imperfect and empirical though they may have been, have afforded this much. But this normal condition has been departed from in the following notable cases. First among fallen races, miserable savages, ignorant of the arts, living in semi-starvation, either perpetual or varied by disgusting excess. "A Jakute or Tungusian will take 40 lbs.

of meat ; three of them will eat up a reindeer at a sitting. One of them in twenty-four hours ate the hind-quarter of a large ox, or 18 lbs. ($\frac{1}{2}$ Pud) of fat, besides drinking an equal amount of liquid butter. And the like among hunting tribes" (Roscher, *Nationalökön.* § 226, note 2). And the rude Polynesians suffer from skin diseases due to poor and almost exclusively vegetable diet and imperfect cooking. (A. R. Wallace, *Malay Archipelago*, 7th ed., pp. 367, 449, 509.) Secondly, among the middle and upper classes, townsfolk in particular, by preferring pleasant to wholesome food, and by eating too much of what else would be wholesome. On this ancient infirmity of mankind let us here only remark that the excesses of epicures are perhaps less hurtful than habitual over-eating, common for example in England, namely, taking too much of ordinary food, which can only be eliminated by a strain on the vital organs, resulting at last in disease.* But indignant gluttony can retort that many errors in dietetics are due to doctors. And, in truth, we may put pseudo-science as a third cause of departure from the normal conditions of diet, a cause still at work, witness the delusive promises of vegetarians and the protests by men claiming to be scientific against the use of mother's milk.† Fourthly, a population may fail to have a sufficient diet, not because they have fallen into savagedom, but because, through economical or political oppression, they are poverty-stricken, or some particular article of great importance to a healthy diet, as salt or milk, becomes so costly that the poorer classes have to stint themselves in its use.‡ Only we must be careful lest we confuse frugality

* See J. H. Bennet, M.D., *Nutrition in Health and Disease*, 2nd ed. 1876, reviewed in *The Times*, Sept. 1879.

† On this perversity see *Encyclop. Britan.* 9th ed. s. v. *Dietetics*. The vegetarians have, I understand, a quarterly magazine of their own in London, and are confident, if they have their way, that they will in time banish disease, drunkenness, deformity, pruriency, poverty, and pestilence from our midst.

‡ A dreadful example of disease caused by unwholesome diet is seen in the *pellagra* of Northern Italy, due physically to an almost exclusive diet of mouldy maize, and due morally to the combination of usurers, of dishonest millers, of unscrupulous bailiffs and tenant farmers, of undutiful landowners and of a robber government. See on the disease and on some of the oppression that leads to it an interesting article in the *Edinburgh Review*, April 1881.

with poverty, or ignorantly set down a population as miserable because to us it would seem misery had we to be content with their food.* Fifthly, in a disorganized society, where the traditions of empirical art have been broken, and women have been driven to work away from the domestic hearth, an unwholesome diet may be due, among those well-instructed on other points, to ignorance of dietetics and of cookery. Finally, the benefit of a wholesome diet may be neutralized by excess in drink or narcotics, of which evils one will be considered in the present, the other in a subsequent chapter.

§ 158. All these excesses and defects in regard to diet must plainly be condemned by economical science, and the means must be sought for to avert or to remedy them. The importance of dietetics and of rational cookery is also obvious, and in some countries, England in particular, there is need of a great reform and the removal of many prejudices† But, without venturing on the domain of the

* The prejudice of certain English travellers that a population eating black bread does so from poverty, and not from preference or parsimony, is noticed by Roscher, *Ansichten*, 1878, I. p. 257. With equal enlightenment a Chinaman thinks Tibet in a state of semi-starvation because he can get no rice there, though it is a land flowing with butter and milk. (See W. Gill, *River of Golden Sand*, II. p. 93.) If we thought the Sumatran villagers were poor and wretched because during a large part of the year their entire food is a pot of rice cooked very dry and eaten with salt and red pepper, we should make a great mistake. In fact their wives and children are loaded with silver armlets and carry dozens of silver coins strung round their necks. (See A. R. Wallace, *Malay Archipelago*, 7th ed. p. 126.)

† England is the classical land for wastefulness, not only as regards sewage (*inf.* § 183), and as regards fuel (*inf.* § 203), but also as regards food, both in choosing it, in keeping it, and in cooking it. Dear flesh is bought when cheap nitrogenous vegetables, notably haricots, would if properly cooked give as much nourishment and be as pleasant to the taste at less than half the cost. Absurd prejudices are rife against beans, against fish, and against goat's milk; this last prejudice being of great injury to the rural poor, many of whom can get little cow's milk. And then there is great loss through food being spoiled before it reaches the consumers—sometimes as much as 70 tons of fish are destroyed in London in a single month as being unfit for food—and again through lack of properly utilizing the remnants from the larder and the fragments from the table. Finally, the loss of food as well as of fuel by roasting before an open fire and by other culinary follies and failings, would

physician and the physiologist, I may be allowed to doubt any great effect upon the health of mankind from scientific dietetics and scientific cookery. They may enable the rich to fare sumptuously every day without the penalties of gout or indigestion; and they may enable certain ignorant populations, like those of Middlesex, to feed somewhat more wholesomely, and at half the present cost. But upon the mass of the rural, and even urban population, they can, I think, confer but little benefit; and physical science, instead of having to teach, may often have only to testify that its prescriptions have been anticipated by the empirical skill of peasants, whether of white skin or black, brown or yellow, in most parts of the world, and by the cooks of many cities, like those of Paris and Berlin.

In regard to staple foods, two points need especial consideration; first their cost, and then their security. As to cost, the calculation is very complicated. A given area which, if used for the production of animal food, would support one person, would, it has been calculated, if planted with wheat, support four persons; if with potatoes, twelve; if with banana-trees or sago-palms, one hundred. And though these particular figures may be incorrect, there is no doubt that there are great differences in the amount of land

reach a vast sum if it could be reckoned. "Until the English housewife," says Mr. Ernest Hart, "learns how wasteful is the roasting jack, how costly the gridiron, and how unnecessary the 'clear fire' and the blazing mass of coals, without which she can at present usually neither cook a cutlet nor boil a cup of coffee, the first lessons of household economy are still unknown to her." And he urges us to naturalize or spread "the art of making an appetizing, nourishing soup with a few bones, a crust of bread, and half a cabbage, a *croute au pôt*, such as every peasant can make, and such as every epicure falls back upon from time to time;" also "the wholesome, delicious and nutritive 'hominy porridge' in which peasant and millionaire alike delight in America"; and farther "the art of stewing over a few embers in a pipkin, which converts scraps of meat, onion, carrot, and bread-crusts into a savoury stew." (Cited from the *British Medical Review* in *The Times* about July 1879. See also Sir H. Thompson in the *Nineteenth Century*, June 1879, p. 982 *seq.*)—Another great source of waste for many years past has been in the preparation of meal. To secure the bread being white the outer and very valuable layers of the grain have been rejected, and not merely the unnutritious outer husk. (*See* L. S. Bevington, *Nineteenth Century*, Sept. 1881, pp. 343, 349.)

required for the production of different kinds of food. In an equally congenial soil and climate wheat requires more land than maize to yield a given amount of nourishment, and sheep and oxen more land than wheat. Naturally the mere weight or bulk of the crop, or even of the prepared food, is not the point in question, but the amount of nourishment. And this is not to be judged of simply by chemical analysis, but by physiology, which distinguishes what is digestible from what passes away undigested. The addition to wheaten bread of the outside layer of the grain may seem to add to the nourishing power got from a bushel of wheat; in reality this addition, by introducing an irritant into the stomach, may carry off more nutritive material than it brought in (Edw. Smith, *Foods*, p. 175). But the area occupied by the crop forms only one element of cost, and one that varies with the abundance of the land; of much weight in Belgium and Bengal, of little in Texas and Uruguay. The toil and trouble of cultivation is another matter very difficult to calculate, varying much for different staple foods, being much more for maize than for bananas, and varying much for the same food according to differences in the fertility of the soil or in the intensity of cultivation. And then, when the crop is at last gathered in and stored away, we have yet to calculate the cost of the various processes which may be needful before it is fit to be consumed. Many grains require to be ground and then baked before they are fit for a staple food. It is not an easy task to separate rice from its husk and its inner skin; but when this is once done, it has the double advantage of requiring neither grinding nor baking, and the Far East has been dispensed from a heavy expenditure in labour and in fuel. One of the barriers to the extension of the use of maize in Northern Europe is the need of skilful cooking to make it palatable, an art in which the negroes of the United States are pre-eminent (Simonds, *Tropical Agric.* pp. 298, 299). But it has the advantage of affording excellent food, such as the polenta of Italy, without requiring to be baked. We must not, however, judge of the cost of the final processes of preparing food by their difficulty or laboriousness. They may afford an admirable field for women's work at

home, or the reverse ; and the facility in England of buying bread ready to be eaten without further preparation is not of necessity a matter of congratulation.

§ 159. In regard, secondly, to the security of a staple food, that is, the security to a given population against famine through failure of crops, the following points are of weight :—

(a) Unlikelihood of a bad harvest. In Burma the unfailing river overflow insures a certain rice crop : how different for the rice and millet of Madras. Potatoes, from their liability to disease, are unfit to be the only staple food.

(b) Capacity of the food for being stored. This varies with the country and the crop. Potatoes here, again, are deficient in our climate, unless they can be cut up and dried, as in part of South America (E. D. Matthews, *Up the Amazon*, p. 213). In India millet can be preserved good in pits for years.

(c) Capacity of the food for being transported, so that the plenty of one place may relieve the scarcity of another. Wheat, for example, is far more transportable than potatoes or rice.

(d) Habitual use of the staple food, or of some other plant that might serve as a staple food, for other purposes, as feeding animals, and especially as affording pleasant drinks. Thus oats are used to feed horses ; some kinds of millet are an excellent fodder crop ; the manioc serves as food for cattle as well as for man ; maize in the United States is the principal grain used for fattening cattle, swine, sheep, and poultry ; and beans are so useful for animals as sometimes to have been despised by man. In extremity, the food of this sort destined for animals can save a population from famine, though at a terrible sacrifice. A much less desperate remedy may be found in the suspension of the making of intoxicating drinks from food-substances ; for these are often used in this way. The cereals of Europe, and also the potatoe, are largely used for distilling spirits ; and though a certain amount of the European spirituous drinks is derived from fruit trees, as cherry trees, plum trees and vines, the great bulk of it is derived from materials that might serve as staple foods. Then, again, barley is the

foundation of English beer, mixed barley and wheat of the German *Weiss-bier*, rye of the Russian *quass*. Moreover, the South American *chica* is prepared from maize; in China a strong spirit is distilled from rice; and several kinds of fermented drinks are made from milk, as *koumiss* in Tartary; while in Africa beer is made by the negroes from millet.

(e) Number of staple foods. Several are less likely to fail than one; all the crops, indeed, may fail in hot climates through drought; but in temperate climates the more moderate extremes of wet and dry seasons can hardly be ruinous to all the main varieties of vegetable and animal produce.

From the foregoing remarks on the cost and on the security of staple foods we can gather how difficult it is to decide in any given case whether one food can, with advantage, be substituted for another. And let us conclude the subject of food with a warning. It is easy to exaggerate the effects of different kinds of food upon a nation or upon a class, to assert what can neither be proved nor refuted, that national greatness comes from the national food, to make virtue dependent on the stomach, and to say that reformed diet will bring in the millennium. It is true there is a gulf between nomadic populations, living mainly on the produce of their flocks and herds, and a settled population; but I doubt if there is evidence to shew that among a settled population it is of any great moment what sort of staple foods they use. Their suffering or well-being, their virtue or their depravity, depend on very different causes. The food may or may not be the effect of their social or moral condition: it is assuredly not the cause. The use of the potato as their staple food was no more the cause of Irish misery and Irish famines than the use of white wheaten bread was the cause of the misery and degradation of the English agricultural labourers in the middle of this century; and the well-being at that time of much of the peasantry of Russia and Germany we must equally decline to attribute to their use of black rye bread. The reckless consumption of flesh-meat by domestic servants in England, and the abnormal demand for fat carcasses (a source of gigantic waste), are not the cause, but the effect,

of a faulty organization of domestic service and of the pernicious custom allowing cooks to have the dripping as a perquisite. And illustrations might be indefinitely multiplied; for man is something more than the resultant of his food and his other material surroundings;* and for our learning it has been written: *Non in pane solo vivit homo, sed in omni verbo quod procedit de ore Dei.*

§ 160. By drink, as already explained, I mean all liquids drunk by man unless taken as drugs or taken primarily as means of nourishment. And they can, perhaps, be roughly grouped into three divisions, refreshing, stimulating, and intoxicating drinks; or into waters, aromatic drinks, and fermented (or alcoholic) drinks. Let us consider them in order.

Common drinking water is, in a certain sense, a necessary of life, and, in a certain sense, furnished to us gratuitously. Inasmuch as it enters into the composition of food and drink, it is absolutely necessary; but it need not be drunk in the form of water. In most inhabited parts of the world it can be got within a short distance, and is fit to be drunk without preparation; but in some parts it needs expense, as digging wells, in some it is absent altogether, in many its quality is defective and needs preparation to make it pleasant or wholesome; while almost everywhere the convenience or need of having it at hand, and not being obliged to go to the spring or the stream to drink it, has involved considerable expenditure. To draw water has been one of the charac-

* Mr. Wallace, an admirable observer, makes a slip in reasoning, when, after observing the abject state of poverty where the sago tree is abundant, he attributes the poverty to the easy subsistence afforded by the pith of that tree. (*Malay Archipelago*, 7th edit. pp. 359-360, 381, 419, 529.) The cases he observes are of savages; and to make his reasoning correct, he ought to shew us other cases of savages in much the same circumstances except in the two particulars, absence of sago (or some food to be got as easily) and absence of abject poverty. As a fact he does give various cases of savages without the sago palm; but instead of being better off by the absence of the guilty plant, they are in a state of still more abject poverty. See citations, *sup.* § 157. We are reminded of Humboldt's calumny against the banana and the 'lazy' Mexicans that has gone the round of Economists. Only Mr. Wallace in his economical views is on an altogether higher level than the prejudiced liberalism of Humboldt.

teristic occupations of women, and may be a heavy task where the house or village is on the lofty hill top, the well or stream in the deep valley below. In scattered and small country dwellings it is often an important part of the labour of the household to fetch or pump up water. Perhaps the extremity in habitual dearness of drinking water is reached at Koseir, an Egyptian port on the Red Sea. The better sort of water comes from springs from eight to ten leagues distant. Every morning a water caravan arrives, each camel bearing six tanned goatskins filled with water. The price is from half a franc to two francs a goatskin. Poorer people get water from nearer springs, but these are all saline, bitter, and hard. Animals are watered from still nearer and worse springs, which can be drunk by man only for a few months after a fall of rain. (Klunziger, *Upper Egypt*, pp. 281, 282.) What a contrast to Burma, with its unfailing abundant streams, where water, which is the universal drink (C. J. Forbes, *British Burma*, p. 84), is got so easily.

The water supply of large towns requires the intervention of authority, as each household taken separately is not in a position to supply itself, and common action is necessary, as well as powers of compulsion against the recalcitrant. In a subsequent book we must consider the question of ownership and management, whether private individuals or private companies should have either, and the control to which they must be subjected if they have; for it is beyond question that they must not be uncontrolled. Even in the country it may be unfit or impossible for separate households to have each an independent supply. The lower parts of a stream are dependent on the upper; and also the underground water supply beneath large regions may be all in intimate connection: the opening new wells may lessen the supply in the old ones (see Prof. W. R. Nichols on Drinking water, etc. in A. H. Buck's *Hygiene and Public Health*, London edit. 1879, I. p. 260). Water is intolerant of isolation; for the sake of their water supply men must act in common. But leaving this point let us look to four others: the quantity of water required in towns, its quality, its cost, and finally the protection of the water supply of the country at large.

§ 161. First, in regard to quantity, it is plain that the

water used as a drink by itself or as an ingredient of other drinks or of food, is but a very small fraction of the amount daily consumed in a town, even if we add to it what is used for cooking purposes. For within each house are the further requirements for washing and cleaning, and outside for watering the streets and gardens, for supplying public baths and fountains, for extinguishing fires, for washing out the drains, and for various processes of manufactures. Hence only a small portion of the expenditure on water supply is to be set down to the score of drink. A liberal daily allowance for a large town has been calculated at 60 United States gallons (that is, 228 litres or about 50 imperial gallons) a head,* of which from 15 to 20 United States gallons ($12\frac{1}{2}$ to $16\frac{2}{3}$ imperial gallons) are for household purposes; and there ought also to be means of furnishing a much greater supply for a short time on an emergency, such as a great fire (Prof. W. R. Nichols, in A. H. Buck's *Hygiene and Public Health*, London edit. 1879. Vol. I. p. 213).† In regard to quality

* Mr. W. Humber, *Water Supply of Cities and Towns*, London, 1876, p. 17, speaks regretfully of thirty imperial gallons a day being considered a wasteful quantity.

† Naturally towns with few manufactures require less.—The following statistics of the water supply of large towns I select from those given *Ibid.* pp. 212–213. The American cities are for the year 1874. Naturally the supply may vary with changes of population and of waterworks.

Town.	Average daily supply per head.	Town.	Average daily supply per head.
Washington . . .	522 litres.	Liverpool . . .	109 litres.
New York (?) . . .	378 "	Leeds . . .	104 "
Jersey city . . .	326 "	Manchester . . .	95 "
Chicago . . .	317 "	Bristol . . .	84 "
Charlestown . . .	235 "	Edinburgh . . .	63 "
Philadelphia . . .	219 "	Hamburg . . .	237 "
Cincinnati . . .	170 "	Dresden . . .	228 "
Glasgow . . .	240 "	Frankfurt a. M. . .	223 "
Chester . . .	207 "	Cologne . . .	200 "
Birkenhead . . .	194 "	Brunswick . . .	154 "
London . . .	181 "	Hanover . . .	116 "
Sheffield . . .	132 "	Leipsig . . .	86 "
Newcastle . . .	127 "		

In ancient Rome the daily consumption has been reckoned at 300 imperial gallons (over 1,350 litres) a head, so liberal was the use of water for baths and fountains. (Humber, *Ibid.*)

"the water should be colourless and clear . . . it should be soft and contain not too large an amount of mineral matter in solution ; it should contain no excremental or other animal matter." (*Ibid.* p. 223.) The quality of softness it may be noticed is rather for the sake of washing and manufacturing purposes than for the sake of wholesomeness as a drink, and moderately hard water is thought by some authorities to be more wholesome (see W. Humber, *Water Supply of Cities and Towns*, p. 29), and is likely to taste better ; moreover, excellent drinking water may be turbid or coloured ; only appearance has to be considered as well as dietetics. In regard to cost several difficulties occur. Production on a very large scale is imperatively required ; for a dozen adjacent streets can be supplied at little extra expense beyond what would be necessary to supply a single street, whereas if each had its own separate water-works the cost would be twelve times as much. And it is further obvious if a large city is to be supplied from several sources that a separate district be assigned to each, as is done in London, so as to save the needless outlay on intercrossing and parallel water pipes. Obviously, then, there must be common and public action, not individual speculation or private supply. But then we have to ask how much is to be spent on water works, who are to pay, and how is payment to be made. The first question can be answered by saying that an abundant supply of good water is owed by each city to its inhabitants, and only the plea of impossibility should be an excuse ; but this does not mean that the *best* water possible should be got at any expense : it is sufficient if it is good. The payment for the outlay should fall on the inhabitants of the city and on no others. The funds of the central government should in no way be diverted to assist those of municipalities, lest a fresh impetus be given to urban concentration ; but rather, to react against this, help should be given by the central government to rural water-works wherever required.* The mode of payment by charging according to

* The little state of Württemberg has recently given a good example. A new office of State engineer for public water-works was created in 1869, to superintend the planning and construction of all public works, for utilizing river and spring waters, and to advise in matters of water

the amount of water used, besides the expense or inefficiency of meters, is open to the graver objection of discouraging the copious use of water by the poorer classes; and thus is not the fit mode of charging for household consumption, though fit for manufactories. But if we adopt some other mode of payment, and neither measure the consumption of water nor restrict the supply, we fall upon the other horn of the dilemma, the danger of reckless waste. An intermittent supply allowing the water to flow into private houses during a certain portion only of the day is the plan in London and many other towns of this kingdom: a miserable device, involving either the expense of a gigantic cistern in each house, or else the liability through accident, through the carelessness of a servant, through a sudden extra requirement, to run short of water with the accompanying grave inconvenience and even danger; above all, the loss of the freshness and wholesomeness of the water because stored in cisterns which, among the poorer classes at least, are almost inevitably foul. (See W. Humber, *Water Supply*, ch. xvi.) It seems best if there is a superabundant supply to allow it as in Liverpool to enter the houses unmeasured and unrestricted, and at the same time to have proper regulations as to the fittings and their repair, and a rigid system of inspection to prevent leakage and unlawful use of the water, an inspection made easier since the invention of a meter for ascertaining the locality of waste. But where the supply is likely to be insufficient if there is much waste, all the water supplied should be measured, and an ample allowance assigned for each person either gratis or for a payment which supply, and to furnish with plans and estimates, all gratis, the local authorities of any village, town, or city within the kingdom, if they asked him. (Prof. Nichols in Buck's *Hygiene*, I. p. 230.) Such an office in so rural a kingdom, I should expect to turn to the profit of the open country, and one of its results was the furnishing the *rauhe Alb* with drinkable water. This is an upland district of porous limestone occupying some 22 square miles with some 40,000 inhabitants in about 68 villages, who, in dry weather often had to fetch up their water from the lowlands. The State engineer devised a plan, classed the villages into nine groups, and by pumps which in some cases raised the water 1,000 feet, has secured them a supply, the State in some cases paying a quarter of the cost of construction, over and above the gratuitous labour of the engineer. (*Ibid.* pp. 222-223.)

would be just the same whether the whole of the allowance was used or not a quarter of it ; whereas all the water used over and above this allowance should be charged at so much a gallon. (Cf. Prof. Nichols, *l.c.* p. 213-215.) The fourth point, the protection of the water supply of the country, requires serious attention in modern times lest the streams shrink up through the destruction of forests (*vide. sup.* § 84) or be polluted with the refuse of manufactories or the sewage of towns, or be exhausted by being diverted to supply the towns ; and the balancing of claims and apportioning of sacrifices between different individuals and between different districts or towns, and between town and country, form no easy task. But I leave these matters and many others connected, such as the proper sources of supply under various circumstances, the methods of purification (as filtering), or the application on a large scale of the process of softening hard water.*

§ 162. Besides common water there are many other refreshing drinks, which are not to be despised because of little commercial importance, and some of which are worthy of great attention as antidotes to intoxicating drinks. Some mineral waters, such as soda and seltzer water, belong to drinks rather than to medicines. Whey was much used in mediæval England. Buttermilk might be called the national drink of Ireland ; and is very common among the poor in Scotland, South Wales, and Cheshire ; and universal in India. Experience has shewn the great possible use of drinks of the class of oatmeal ptisan such as was served out in the year 1872 to the navvies on the Great Western Railway when the gauge over a vast distance had to be shifted with the greatest possible speed. (*Encycl. Britan.* 9th edit., s. v. *Dietetics*, p. 203.) In certain ironworks in the North of France the workmen are given gratis a pleasant and wholesome drink, composed of a decoction of liquorice with a slight admixture of acid (Périn, *De la richesse*, II., p.

* See the formidable array of books given by Prof. Nichols at the end of his article On Drinking Water and Public Water Supplies in Buck's *Hygiene* (Vol. I. p. 310 seq.) already referred to. Also Dr. Smith, *Foods*, ch. xxxiii., who notices how hard water, besides being less useful than soft water for cooking, causes in other domestic processes an enormous waste of soap, labour and material.

337).* Oriental sherbet, lemonade and various syrups form another category of refreshing drinks, and the ideal in their consumption seems reached (according to the *Builder*) in the city of Seville, where drink stalls abound, each under a picturesque awning, for the sale of a variety of cheap and excellent drinks: a multitude of syrups mixed with very cold water; lemonade or orangeade made in the presence of the purchaser; and *orchata*, a delicious milky drink, from crushed almonds and sugar. These street drink stalls are more frequented than the wine shops, and men of admirable physique, athletic horse-tamers and toreadors can be seen to leap from their horses and drink with the utmost satisfaction one of these innocent decoctions.

§ 163. The consumption of aromatic drinks is one of the characteristics of our times, and the Western world (Europeans and their colonists) can be roughly divided into four groups, according as they are under the sway of the tea-leaf, the coffee berry, the cacao bean, or the leaf of the maté plant. Let us look at a few figures, some being approximately accurate, others merely vague estimates; for while consumption of commodities wholly imported, as tea in England, can be accurately measured, we can only guess at the consumption in the producing countries, as of tea in China, coffee in Brazil, and cocoa in Trinidad and Equador. Mr. Simmonds (*Tropical Agricult.*, 1877, p. 81) estimates the production of tea at 1,290,037,000 lbs., assuming that the home consumption of China is 1,000,000,000, or half what another authority allows. Whether right in this, or not, I think he does not allow enough for the exports from China by land. For tea is the great beverage for the whole of North and Central Asia—for Armenians, Persians, Tartars, Kalmucks, Turkmans, Mongols, Tibetans, (James Bryce, *Transcaucasia and Ararat*, p. 173-4). In the Western World and its colonies Russia, the United Kingdom, and Australia, are tea-drinking. In the United Kingdom the consumption per head has steadily risen from 1·22 lbs. in the year 1840, when the con-

* It may be added that during the great summer heats the firm supplies them with a mixture of wine and aerated water at the price of tenpence the litre; while at all times they are forbidden to quit the works to get drink, and are allowed not more than three litres of beer a day.

sumption of coffee was nearly as much, to 4·44 lbs. in the year 1875. In the Australian colonies the average of tea taken per head is about 10 lbs. The estimated consumption in 1873 in Holland, Canada, and the United States was large, but far outstripped in all three by the consumption of coffee; and thus though Holland in particular takes more tea per head than Russia, she does not belong like Russia to the tea drinking, but to the coffee drinking countries. To reckon the production of *coffee* is not quite such hopeless guesswork as in the case of tea, and in 1875 we may put it at 1,350,000,000 lbs., or about double what it had been fifteen years before. The consumption per head in 1873 in the following countries was:—

	lbs.		lbs.
Russia in Europe	0'19	Sweden	6'11
United Kingdom	1'00	Switzerland	7'03
Italy	1'00	United States	7'61
Greece	1'42	Norway	9'80
Austria	2'13	Belgium	13'48
France	2'73	Denmark	13'89
Germany (?)	4'00	Holland	21'00

(Simmonds, *l. c.* p. 30.)

The production of *cocoa* and *chocolate* is smaller than that of coffee, but more difficult to reckon, because so much of the produce is consumed by the inhabitants of cacao growing countries. Perhaps it reaches 80,000,000 lbs. This class of aromatic drinks is to the Spaniards, Mexicans, and some of the Northern South Americans what tea is to Englishmen: the Spaniards think it the severest punishment to withhold it even from criminals (Simmonds *l. c.*, p. 2). *Yerba maté* or Paraguay tea, from a plant growing there and in parts of Brazil, is pre-eminently the aromatic drink of the southern part of South America, and the total produce, perhaps 60,000,000 lbs., is divided among a comparatively small population. In the Argentine Republic in 1872 the consumption averaged 13 lbs. per head, against 2 lbs. of coffee and $\frac{1}{2}$ lb. of tea. The 'gaucho' of the plains will travel on horseback for weeks, asking no better fare than dried beef, washed down by copious draughts of maté. (*Ibid.* p. 126).

Besides these four leading aromatic drinks are other minor ones, as guarana, from the seed of a plant which grows in

the basin of the Amazon and Orinoco;* chicory used in England and the continent to mix with coffee, and having an aromatic oil of its own; coffee leaves in Sumatra; sloe and strawberry tea and sage tea in Northern Europe, and other substitutes for tea in various countries. (Simmonds, *l. c.* pp. 26, 27; Smith, *Foods*, pp. 341, 358, 368.) Probably some of the 'sweet and pleasant liquors' used in mediæval England by those abstaining from wine (T. E. Bridgett, *Discipline of Drink*, pp. 97, 98) were of the nature of tea.

Having taken a survey of aromatic drinks, let us remark on them as follows. The great delight taken in them by the majority of the human race, the widespread opinion of their beneficial effect on our powers of working or enduring, the absence of any immediate ill effects, moral or physical, from their use, are points not open to dispute, and which entitle us to look with great suspicion on any medical theories that denounce the use of stimulants as a pernicious innovation. They have all, I suppose, the common character of being excitants of the nervous system, but not all in the same degree, and varying also in other characters.† Thus the percentage of fat in tea is about 5, in coffee about 13, in cocoa about 36. Moreover, the method of taking stimulating drinks may greatly change their effect. Thus tea taken by itself is said to waste the system by promoting vital action which it does not support; but when lemon juice and much sugar are added, as almost always in Russia, or milk, as in England, the compound nourishes as well as excites. Sometimes the addition is so great that the stimulating liquid can rightly be called a food, as the continental café au lait, half milk, or the yerba maté, not ready for drinking till mixed with so much sugar as to have become a thick syrup. And in general it can be said that the vast increase in the recent consumption of sugar by Europeans is mainly due to the vast increase in their consumption of stimulants. These, moreover, form an excellent antidote to

* Many Bolivians cannot begin their day's work without a glass of guarana (E. D. Mathews, *Up the Amazon and Madeira*, pp. 16-17). It is also valuable as a medicine.

† The physiological effects of tea are examined by Dr. Edward Smith *Foods*, pp. 346-354, and of coffee, pp. 366-368.

over-indulgence in intoxicating drinks; and the 'coffee-palace' may, in times and places, be an indispensable weapon for overthrowing the 'gin-palace.' No doubt tea and coffee, like other good things, can be misused; and it is said that much physical mischief among the English factory population results from their being given to children instead of milk. But the main part of the evil is, I take it, not the use of tea or coffee, but the disuse of milk; it remains to be shewn that the children would get any more milk if these stimulating drinks were banished from the land; and in any case we cannot say that because they are unfit for children they are therefore unfit for adults.

§ 164. The third class of drinks, which can be called alcoholic, fermented, or intoxicating, resembles the class of aromatic drinks in being of great moment for commerce and taxation, but is unlike it in being often the immediate cause of great moral and physical evils. We have come to an ancient and still open wound of humanity; and not only the upholders of strong drink, but also, by an irony of fate, its very opponents seem incapable of writing with sobriety. Let us begin with a few facts and figures, and then seek from amidst the controversy a few propositions to which we can assent.

All fermented drinks can, I think, be conveniently classed in four great divisions, namely, miscellaneous drinks, beers, wines, and spirits. Miscellaneous fermented drinks are such as are neither made from malted grain, nor from the fruit of the vine, nor are the result of distillation. Cider and perry are familiar examples, cider being still the main fermented drink in parts of England and in Normandy; and to this class also belong the homely preparations like elder wine, ginger wine, ginger beer, and treacle beer. The juice of certain palm-trees is used as an intoxicating drink in South Africa, and among the Hindus and Malays (known to Europeans as toddy or palm wine), and was made by the Babylonians in the time of Herodotus (I., 193). As ancient and perhaps once as widely spread, but now sadly fallen, is the drink prepared from honey, and known as mead. It was, perhaps, the original alcoholic drink of the Aryans when they settled in Europe; traces of its prevalence are to be

found in Greek literature ; it was not unknown to classical Rome, and was frequent in Saxon England. But its favourite home has lain in the great honey lands of Eastern Europe. It was of old pre-eminently a Scythian drink, and has held its place among the Sclavonians till recent times, when it has followed the decline of bee culture, due to the inroads of sugar, and has yielded its place to a horrible successor in the shape of ardent spirits (Victor Hehn, *Kulturpflanzen und Haustihere*, pp. 89-91). Koomiss (or kumys), made by the Tartars from mare's milk ; fermented maple juice, once a favourite drink of the Red Indians ; and soma, used in sacrifice by the ancient Brahmans, belong to the miscellaneous class of fermented drinks.

Beer, or malt liquor, was a characteristic drink of the ancient Egyptians (Ζύθος was the name for it written in Greek), and to this day is much used in the Soudan and Abyssinia, as well as on the Gold Coast and the Congo. It was conspicuous by its absence among the Greeks and Romans ; but on all sides they were surrounded by beer-drinking populations, Iberians, Kelts, Ligurians, Illyrians, Phrygians, Armenians, and, as we have seen, Egyptians ; beer also was drunk by the remote Germans, Lithuanians, and Sclavonians. With the advance of the Hellenic and Latin empire, languages and manners, the domain of beer shrank before that of wine, and the process seems not to have been interrupted by, or to have been renewed after, the barbarian invasions. But improvements came in the manufacture of beer ; the use of hops in mediæval Flanders and North Germany created the new European as opposed to the primæval beer ; and in recent times the durability and the cheapness of North German beer reconquered South Germany, from whence, in the Middle Ages, it had been expelled by wine. Moreover, by a strange chance beer is held now to be characteristic of Germans and German manners ; whereas, at the beginning of European history it was pre-eminently the national drink of the Kelts.* To describe the varieties of beer is not necessary, but only to notice that they contain very different proportions of alcohol. In England at the present day "there may be 10 per cent.

* See the interesting account given by Hehn, *l. c.* pp. 79-89, 350-354.

in the strong East India pale ale, and 15 or 20 per cent. in many old home-brewed ales stored for private use; but usually the amount varies from 5 to 7 per cent. in moderately good ales, and may only be 1 to 3 per cent. in small beer" (Dr. Edward Smith, *Foods*, p. 412). The following table from the *Times* about 12th August, 1880, gives the production of beer in Europe and the United States during the year 1879. The hectolitre is about 22 gallons.*

	Hectolitres.		Hectolitres.
(3) German Empire .	38,946,510	(5) The Netherlands.	1,600,000
(2) Great Britain .	36,597,550	(4) Denmark . .	1,100,000
(7) United States .	15,400,000	(10) Sweden . .	930,000
(8) Austria-Hungary.	11,184,681	(12) Italy . . .	870,000
(11) France . . .	8,721,000	(9) Switzerland .	724,000
(1) Belgium . . .	7,854,000	(6) Norway . . .	615,000
(13) Russia . . .	2,300,000		

§ 165. Wine forms another division of fermented drinks, and holds the first place among them in the literature of Western Asia and Europe. According to Hehn (*l. c.* p. 25, seq.), the native home of the vine is the region south of the Caspian Sea, the ancient seat of the Semitic race; and the knowledge of wine with the cultivation of the vine passed from the Semitic Phœnicians to the Greeks, and from Greece to Italy. By degrees vineyards have spread northwards and westward, and, crossing the ocean, have struck vigorous roots in California, Mexico, and Australia. They have had, indeed, to submit to two notable retrogressions; one from the East, where they have been withered by the Mahometan prohibition of wine, the other from parts of Europe; namely, Southern England, Northern France, and parts of Northern Germany, as Thuringen and the Mark of Brandenburg, whence they have been driven by the competition of wines from more favoured regions, in Germany, perhaps, by a

* If Ireland is meant to be included under Great Britain the return seems too small. In proportion to population most beer is made in Belgium (167 litres=about 34½ gallons per head) very little in Italy and least of all in Russia (3 litres=about 5½ pints per head). The numbers prefixed to each country show their place in the order of production per head. If Spain and Portugal were included they would I think show a smaller production even than Russia. (Cf. A. Baer, *Der Alcoholismus*, note 167^d.)

change in the climate (Freitag, cited by Baer, *Der Alcoholicus*, pp. 218, 219).* The proportion of alcohol is very different in different kinds of wine, but in general exceeds that in malt liquors, though far below that in spirituous liquors.† The local consumption of wine cannot, like that of beer, be judged, even approximately, by the local production; for wine is the object of an immense international commerce. In the United Kingdom the consumption per head in the years 1845, 1860, 1865, 1870, and 1875, was respectively, 0·24, 0·23, 0·40, 0·49, and 0·53 gallons; in 1880 about the same as in 1870.

* The following table from Simmonds, *Tropical Agricult.*, p. 428, gives in round figures the area under vines in most wine-producing countries. I have added some conjectures.

Year.	Country.	Acres of Vineyards.
1873	France	6,379,000
(?)	Italy	(?) 2,000,000
1875	United States	2,000,000
1873	Hungary, 998,000 acres	} 1,389,000
1875	Austria, 391,000 acres	
	Austria-Hungary	
1875	Spain	1,000,000
1873	Portugal	469,000
1873	German Empire	335,000
1873	Roumania	247,000
1873	Greece	123,000
(?)	Russian Empire	(?) 120,000
(?)	Switzerland	(?) 100,000
1874	Algeria	45,000
(?)	South America	(?) 30,000
(?)	Mexico and Central America	(?) 30,000
1875	The Cape	18,000
1876	Australia	16,000

† There is a perplexing discrepancy of statements in regard to the proportion of alcohol in different drinks; but as we must have some figures, the following are perhaps sufficiently correct for working purposes. Small beer in England and Germany can be said to have usually something under 2 per cent. of alcohol; much German beer about 4 per cent.; the ordinary sorts of English cider, porter and ale about 6 per cent.; Burton ale 8 per cent.; the lighter sorts of wine as hock, Burgundy and claret, from 8 to 12 per cent.; sparkling Champagne about 12 per cent.; the stronger sorts of wines as Marsala, sherry, port and Madeira from 16 to 20 per cent.; the weakest spirits over 30 per cent.; most spirits from 45 to 60 per cent.

Spirits can be put as the fourth and last division of fermented liquors, far surpassing the others in the proportion of alcohol which they contain, and only having attained their world-wide importance in modern times. From time immemorial, indeed, the distillation of ardent spirits from rice has been practised in China; but the process was unknown to the Greeks and Romans (though they understood the distillation of aromatic waters), and appears to have first reached Europe through the Arabs, and not to have become of commercial importance till the fifteenth century at earliest. The distilled spirit first used as a medicine was called *aqua vitae*, from the medical delusion as to its efficacy (see A. Baer, *Der Alcoholismus*, p. 119 and note 101), and the name has survived in the French *eau de vie* and the Keltic whiskey, a corruption of usquebaugh. The European grains and starch-bearing vegetables, like potatoes and turnips, are used for distillation, and the spirituous liquor, according to diversities of manufacture, is called by various names, as gin, whiskey, or brandy. The finer sorts of brandy are distilled not from grain, but from wine. Among European fruits, cherries and plums are conspicuous for their use for distillation. The only sort of spirit imported into Europe in any large quantities is rum, which is made from the juices of the sugar-cane.

It is difficult to ascertain the consumption of spirits in any given place and time; and the frequency of smuggling and of illicit distillation may render accuracy impossible. In England the consumption in the years just before and after 1740 is said to have reached or surpassed a gallon a head, a proportion not afterwards attained till the 8th decade of this century, whereas in Ireland this was often exceeded till the reform of Father Mathew began to take effect; while in Scotland till about 1860 an annual consumption of over two gallons a head seems for many years to have been the rule.* In the Prussian dominions the consumption of spirits

* After a period of diminution it rose again and in 1877 amounted to about 2½ gallons a head. See the Lords' Report on Intemperance, *Parliam. Papers*, 1868-69, x. p. 507.—In referring, as I must often, to this Report, I shall give the pages of the *volume*. There is also a separate paging in Roman figures to the Report, of which page i. corresponds

in the year 1846 has been reckoned at 5·48 Prussian quarts (about 5·25 litres or 1·25 gallon) a head, and at 5·97 in 1855, the increase being probably entirely due to greater use in manufactures (C. Dieterici, *Handbuch der Statistik des preuss. Staats*, 1861, pp. 480–481). Previously the consumption had been much greater, as much as 8·1 Prussian quarts in 1831; while from 1857 onwards it was something over 6 Prussian quarts. In the new German Empire the average for the four years 1872 to 1875 was just under 10 litres a head, and thus over 2 gallons; in 1875 alone 10·75 litres (Baer, *Der Alcoholismus*, pp. 238, 248). In Russia the average is perhaps some 14 litres, or over 3 gallons a head (*Ibid.* p. 213). In France the consumption of spirits has steadily risen during the last thirty years from about 2 to about 3 litres a head, but varies immensely in the different regions, being comparatively small in the wine districts, as the following table will show (*Ibid.* pp. 166–167):—

to p. 471 of the volume, page xi. to p. 481, and so on. Thus the page of the Report can be got by deducting 470 from the page of the volume. The following figures from Mr. W. Hoyle in the *Times*, 29 March, 1881, and Baer, *Der Alcoholismus*, p. 189, are returns or estimates of the consumption of the different fermented drinks in the entire United Kingdom in three different years. I give round figures for the sake of simplicity.

Kind of Drink.	Total gallons consumed in the year.		
	1860.	1870.	1880.
Beer	674,170,000	945,648,000	905,088,000
British spirits	21,404,000	22,613,000	28,457,000
Foreign spirits	5,521,000	8,439,000	8,477,000
Wine	6,718,000	15,079,000	15,852,000
British wines, &c.	12,500,000	15,000,000	15,000,000
Total population in millions of souls.			
	28	31	34½
Total payments for the drink in millions of pounds.			
	84½	118½	122

In the year 1876 the payments amounted to as much as 147 million pounds.

Consumption of Spirits in France per head.

	1839.	1859.	1873.
North . . .	6'85 litres.	5'34 litres.	5'88 litres.
North-West . . .	2'92 "	2'97 "	4'35 "
North-East . . .	2'46 "	2'72 "	3'39 "
Centre . . .	0'61 "	0'92 "	1'38 "
South-West . . .	0'81 "	1'03 "	1'29 "
South . . .	0'35 "	0'70 "	0'80 "

The fiscal returns for the United States would shew an average consumption there of 11 litres a head in 1844 and 8'38 litres in 1870, were not our calculations upset by the gigantic contraband trade ('whiskey rings'), and we can only say that the consumption was more than the figures given, but how much more in each case we cannot tell (*cf. Ibid.* p. 177).

§ 166. There are some who would have us believe that alcohol, except when used as medicine, is a poison, and that all the efforts of man to procure fermented drinks from the dawn of history to the present day have been worse than useless; the consumption of these drinks sheer mischief, no mere preponderance of bad results over good, of abuse over use, there being no good results from them, no use for them at all. But such a doctrine, which bears all the appearance of extravagance, requires to be proved rather than refuted; and leaving it, let us listen to sober reasoning and wide experience, which will, I think, commend the following propositions to our acceptance.*

(a) Children are better without any alcoholic drink; and

* I have been mainly guided by the twelve papers on the Alcohol Question by twelve leading members of the medical profession, published in the *Contemporary Review* for November and December 1878, and January 1879.—Let us clear the question at issue by noticing three possible misapprehensions. First, no argument against the use of alcohol can be drawn from the alleged repugnance of all children and all animals to all intoxicating drinks, supposing it true. As a fact, it is false. See E. Smith, *Foods*, p. 424. Samuelson, *History of Drink*, pp. 1-3. Secondly, because *much* alcohol undoubtedly is very injurious, it does not in the least follow that a *little* alcohol is somewhat injurious. The quantity may make all the difference, just as a man may eat himself to death with the wholesomest food. Thirdly, it is no proof, on the other hand, of the fitness of alcohol for ordinary drink that it is of great use (as I believe it certainly is) in medicine and surgery.

whether its habitual use is ever of any benefit to those who are yet in the growing stage of life, is doubtful.

(b) Among adults there are certain classes of persons, females especially, to whom alcohol in any shape is mischievous, and who may be a numerous body in certain societies. Just as certain foods, useful for the mass of men, will not agree with certain individuals and certain families, so there are some who, as doctors would say, are intolerant of alcohol; and it is unfit for certain morbid conditions of body; for those also who are excitable and weak of will, and where there is a strong physiological probability that its use will lead to excess.

(c) For the majority of healthy adults in most employments a moderate amount of fermented drink is beneficial, particularly, but not exclusively, for males, and for those in later life, and engaged in head work. The anæsthetic or sedative effects of alcohol may make it indispensable for the full exercise of intellectual powers; and it is almost, if not quite, necessary for many of those who have to exert great muscular force, particularly when, as with metal workers, this has to be done in a very high temperature. Speaking of workmen in general, Le Play, their faithful delineator, says: "Many facts seem to shew that fermented drinks have a good effect on the physical constitution" (*Les Ouvriers Européens*, t. i., p. 317, ed. of 1879). And the acid astringent *vinho verde*, is described as a great restorative to the hard working and sober peasantry of Northern Portugal by one who knows them well (Latouche, *Travels in Portugal*, pp. 316-319). Moreover, the moderate use of fermented drink delivers many from the bonds of irrational timidity and unsocial bashfulness, and at the cost of no physical injury, but often bestowing physical advantage into the bargain. The world is filled with sorrow, and men are distracted with vain solicitude about the things of this life. To drown care in drink is excess; but not to use God's gifts under the guidance of reason, and to drink in moderation and with gratitude the good wine that maketh glad the heart of man.

(d) For the majority of those adults who are below the standard of good health and subject to some kind of debility, the habitual use of some kind of alcohol is very beneficial, and

sometimes even necessary for their physical well-being. To this class belong much of the town population of modern cities, and those moreover, wherever they live, who are under-fed and over-worked. Often a glass of malt liquor, or cider, or wine of the country, can be got for less cost than the extra amount of ordinary food that else must be eaten to preserve health ; for alcohol can lessen the necessity for food by diminishing the waste of the system that has to be repaired by food ; and thus for a temperate workman to forego his glass of beer may be anything but an economy. For many persons, especially in later life, after fatigue mere repose is not sufficient to fit them for a meal, and digestion needs to be facilitated by alcohol ; for many others even without previous fatigue ; and perhaps in our own times those are more numerous than ever before, to whom the Apostle would have to say as to Timothy : Do not still drink water : but use a little wine for thy stomach's sake, and thy frequent infirmities (1 *Tim.* v. 23).

§ 167. The advantages of alcohol set forth in the two last propositions pre-suppose that in using it due regard is paid to time, to quality, and to quantity. Hence, we can obtain three further propositions.

(*e*) Alcohol must only be taken at the right time. Whereon it is sufficient to notice the general rule that it be taken late in the day rather than early, and not in the intervals between meals ; and again, not before long exposure to great cold, nor, perhaps, at any time by Europeans in the tropics.

(*f*) The right sort of alcoholic drink is to be selected. It may make a great difference through what medium a given amount of alcohol is conveyed and the particular drink which is suitable varies with the individual and the circumstances. Thus, the nutritive matter, such as sugar and gum, which are contained in malt liquors, renders them of great value for many persons, but also less fit for those of sedentary habits after middle age. The fully fermented light wines contain much acid tartrate of potash, whereas there is little of it in the partially fermented stronger wines ; and these, moreover, contain much sugar which is absent in the lighter wines. Whether, therefore, an ounce of alcohol is taken in the form of sherry or in the form of claret is by no means a

matter of indifference. Spirits, again, are not the same as wine in their effects; and, further, among spirits there is all the difference between new whiskey, for example, which may well be called poisonous, and whiskey which has lost the injurious fusel oil by being kept for long in wood; or between good navy rum and the adulterated spirits of the London gin palaces.*

(g) The right quantity of alcoholic drink is to be taken, not too little nor too much. This quantity is very different, according to constitution, age, time, place, and many other circumstances. For a modern Englishman of the middle or upper class, an ounce of pure alcohol, or about what is contained in half a bottle of good claret, may be, as Dr. Garrod calculates, about the maximum quantity to be taken each

* See Dr. A. B. Garrod and Dr. Edw. Smith. The following citation from Dr. R. B. Carter justly distinguishes what teetotalers mix up in confusion. "I have written so far about 'alcohol,' as if under the dominion of the teetotal delusion, that all liquids which contain it are of the same general character, and produce the same effects. Against this delusion, however, it is necessary formally to protest. When obtained by any simple method of fermentation or distillation, alcohol is mingled not only with water, but also with various substances derived from the fruit, the grain, or other vegetable matter which furnishes it. Alcohol is a very powerful solvent, and it retains most of these substances in solution. They influence its action in various ways; and every one who is practically acquainted with the subject is aware of the different effects which different kinds of alcoholic drinks will produce. In many instances, too, the non-alcoholic fruit or grain products undergo great modification by keeping; and this to such an extent that between new and old wine, or new and old spirit, there may be little in common but the name Of late years, however, and chiefly by means of a machine called a 'patent still,' manufacturers have succeeded in separating alcohol from the other products with which it was formerly always associated;" and thus "spirit is now distilled very cheaply from materials which would communicate a nauseous flavour if anything more than alcohol and water were brought over in the process." This so-called 'silent' or 'pure' spirit is artificially flavoured as brandy, whiskey, or rum; but "is simply nude alcohol divorced from its natural alliances;" and this cheap and nasty drink is what is in common use among sots. "There can be little doubt that the alcoholic liquids in which a natural flavour is retained are far less dangerous than those, unfortunately too common, in which flavour, if it exists, is the result of artificial admixtures." (*Contemporary Review*, Jan. 1879, pp. 363-364.) Dr. Radcliffe denounces 'silent spirit' as the worst and rawest kind of whiskey. (*Ibid.* p. 351.)

day ; but I do not know if such calculations are admissible. Obviously, there is excess where there is intoxication, and our age is only too familiar with the physical decay and dreadful death of the confirmed drunkard.* But there can be excess without intoxication. Many Englishmen of good position, and who have never been drunk in their lives, suffer from gout and diseases of the liver due to habitual previous excess in wine or spirits.† And sometimes a man who gets drunk is less injured than another who takes much and still keeps sober ; nor perhaps is excess ever more mischievous than when in the shape of drinking at one time a comparatively small amount but repeated at frequent intervals.

§ 168. History is filled with the abuse of intoxicating drinks. In remote ages a Chinese legislator had to lament the prevalence of excess, and to endeavour to oppose it by exhortation and menace. (James Samuelson, *History of Drink*, London, 1878, Ch. II.) Among the ancient Hindus, and later among the Greeks, intoxication, besides other worse vices, was connected with the worship of the pagan gods. The degenerate Jews in the time of the kings had to bear the reproach of the prophet : Wo to you that rise up early in the morning to follow drunkenness, and to drink till the evening, to be inflamed with wine (*Is. v. 11.*) The *symposia* or drinking parties of the Latino-Hellenic world often deserved the name of drunken orgies, and many of their revolting details have been preserved to us in the pages of Greek and Latin literature. The barbarians around were also no models of sobriety ; they were considered by the Greeks in the time of Plato as addicted to drunkenness (Plato, *De legibus*, i. p. 637) ; and five centuries later Tacitus marked how the intemperance of the Germans gave the Romans a great advantage over them in warfare. In several parts of the Roman Empire, when

* "When the sot has descended through his chosen course of imbecility or dropsy to the dead-house, Morbid Anatomy is ready to receive him—knows him well. At the *post mortem* she would say, 'Liver hard and nodulated. Brain dense and small, its covering thick.' And if you would listen to her . . . tale, she would trace through the sot's body a series of changes which leave unaltered no part of him worth speaking of." (Dr. Moxon, *Contemporary Review*, Dec. 1878, p. 44.)

† Cf. *sup.* § 157 on a similar excess in regard to food.

the barbarian invasions had already set in, drunkenness was a common vice, as we can gather from St. Chrysostom in the East, from St. Augustine in Africa, and from St. Caesarius in Gaul. During the long interval between the fifth and the sixteenth centuries drunkenness had to be combated by Christianity in the Teutonic world. In the twelfth century England had become notorious for excess (T. E. Bridgett, *Discipline of Drink*, London, 1876, pp. 78-79); whereas in Italy, or in many parts of it, we can safely infer the prevalence of moderation in drink from the little mention of drunkenness by the great preachers of the eleventh, the fifteenth and again the eighteenth centuries (*Ibid.* p. 75-76). In Hither Asia and North Africa the conquests of Mahometanism brought amid innumerable evils the advantage of comparative sobriety; just as some eleven centuries before, Buddhism may have worked a temperance reformation in Further Asia. At the present day perhaps it may be roughly computed that about two-thirds of the Moslem world use no intoxicating liquor; and at least till quite recent times intoxication could hardly be said to be prevalent among the Chinese, the Burmese and the Hindus. In parts of Europe the revolt against the Christian Church in the sixteenth century was accompanied and followed, as might have been expected, by an outbreak of intemperance notably in Germany and England. James I. was frequently drunk and we can say the same of many in the upper class, among them politicians and men of letters, not only country squires,* till the reformation of polite society in the reign of George III.

But let us not be deceived by the conspicuousness of drunkenness in the past. Detailed accounts of intemperance in high places, of elaborate carouses, of the rules and etiquette of drinking, of bacchanalian songs, can be preserved, and may shew that drinking was not a rare phenomenon, but do not tell us how many per cent. of the population got drunk, or how often. Sir James Paget (*Contemporary Review*, November 1878, p. 688), justly doubts

* Examples are to be found in Lecky, *Hist. of England in the Eighteenth Century*, I. pp. 477-478. On James I. and his court see Lingard, *Hist. of England*, VII. pp. 51-53, 6th edit.

the great habitual drinking of our ancestors ; we have tales of this as of other extravagances ; the more customary moderation is not recorded, because not remarkable ; nor could our vigorous race have been propagated through generations composed chiefly of habitual drunkards.* At one time the vitality of the English race was indeed threatened by drink ; but then the drink was not the ancient malted liquors, or mead, or cider, or wine, but spirits ; and the drunkenness was not among the rich, but among the common people ; and the time lay in the modern period of drunkenness to which I now turn.

§ 169. The abuse of intoxicating drinks among the European races or through their agency has assumed in modern times a new character making drunkenness far more pernicious and repulsive than before, and we can justly speak of a *new period* marked by three characteristics : first by the spread of the use of spirits among the lower orders ; secondly, by the spread of adulteration of both spirits and malted liquor ; thirdly, by the spread of the use of spirits among savages and subject races through European agency or government, as a means of exterminating them or of extracting revenue from them. Drunkenness on the part of the rich, though in England it was common for a century after the new period began, is not a characteristic of it ; nay, the degradation of drunkenness that has accompanied it has rather helped to make this vice disreputable

* An unguarded reader is likely to be much misled by Mr. James Samuelson's *History of Drink*, London, 1878, a book in which much useful material is to be found, and many sensible remarks, and a moderation rare in the opponents of alcohol ; but in which history is distorted, bad authorities are blindly followed instead of being strictly weighed, the exceptional is put as if it were ordinary, details of excess are given without proper explanation of how much or how little they prove, and the effect is an exaggeration of ancient, and still more of mediæval, drunkenness, and a distortion of the course of history. He also falls into an extraordinary optimism concerning the sobriety of the modern Germans displays his political antipathies, and in many offensive passages his religious or irreligious prejudices. A far more trustworthy book, though occupying a narrower field, is Father T. E. Bridgett's *Discipline of Drink*, London, 1876, an excellent little work ; and for modern drunkenness the laborious and impartial researches of Dr. A. Baer, *Der Alkoholismus*, Berlin, 1878.

.. and disgusting for the refined classes. The new period has set in at different dates in different countries, for example, in Sweden about the year 1575 (*Cf. Baer, Der Alcoholismus*, p. 204), in Great Russia about the same time (*Ibid.* p. 210), in France not till about 1825 (*Ibid.* p. 158). In England the Revolution of 1688 can be said to have begun it; the new government favoured the trade of distillery (Lecky, *History of England in the Eighteenth Century*, 1. p. 479), and the passion for spirits implanted in the nation has never been extirpated. Gin drinking grew apace, and in the fourth and fifth decades of the eighteenth century reached a frightful height, till, as we shall see, wise legislation reduced the evil to a more endurable level. Turning to barbarous or subjugated races, we meet with the destruction of the North American Indians by the English colonists and their descendants with the weapon of 'firewater'—one of the most hideous of all the tragedies of history (Samuelson, *l.c.* pp. 206-208. Baer, *l.c.* pp. 150-151). At the present time vast quantities of spirits (mainly rum) are exported from England to the West coast of Africa, and consumed by the inland tribes (*Ibid.* p. 9), God knows with what results. In regard to South Africa, Sir A. Conynghame says of the Kafirs: "The facility with which these untamed savages can attain any amount of villanous drink is one of the most fruitful sources of danger. Some of the chiefs, being aware of the evil, forbid canteens in their localities, and have repeatedly requested that the same prohibition should be extended among the adjoining (British) districts. The answer of authority has always been, 'that the natives should place a moral restraint on themselves, and not imbibe more than is beneficial; and that trade cannot be impeded, simply because it may engender evil consequence among the natives'" (cited in the *Dublin Review*, April, 1881, p. 398). In Ceylon the licenses sold by government to set up arrack taverns have been a curse to parts of the country. (John Capper, *Old Ceylon*, pp. 13, 80.) In British Burma the elders tell with sorrow the common tale that English spirits and opium are gradually destroying in the rising generation their native good qualities; and the increase among the young of indulgence in opium and spirits

appears only too true. (C. J. Forbes, *British Burma*, London, 1878, pp. 45-87.) Years before, a similar spread of drunkenness was shewn by irresistible evidence to have followed the British rule in India, where licensed liquor shops sprang up in numbers to the profit of the treasury and the publicans at the cost of native prosperity and morality. (J. M. Ludlow, *British India*, Cambridge, 1858, 11. pp. 302-303, Cf. Baer, *l. c.* pp. 153-154). The Australians and the Maoris have withered away before the British colonists, and no small part of this lamentable destruction is due to British spirits (Baer, *l. c.* p. 154, and note 140*)^{*}.

§ 170. Returning to European races it seems certain that drunkenness was a very prevalent and pressing evil among the Swedes and North Americans in the earlier parts of this century, as it is to this day in the British Islands, Poland, Russia, and Switzerland; that it has diminished in the United States, and more recently in Sweden, Norway, Denmark and Finland; that there is much of it in Germany, and that it has probably increased there in the decade after the establishment of the empire; that Belgium has suffered a disastrous increase of drink-shops and drunkenness, that in France, once a land of great sobriety, the last fifty years have witnessed a growth of drunkenness, till it has become a serious evil.† But let

* I will not cite Dr. Baer's severe remarks on British interests and British policy, for I cannot answer them. Indeed, the only answer is to try and undo as far as is still possible the wrong that has been done.

† See the careful examination of all the above-named countries, and many figures regarding them in Baer, *Der Alkoholisismus*, pp. 158-267. See also for the United States, Samuelson, *Hist. of Drink*, ch. xiv.; and for Sweden, *Ibid.* ch. xiii. The Swedes appear to have got a still worse reputation than they really deserved, and a reasonable computation will reduce the amount of spirits they were said to consume a head every year from nearly fourteen gallons to something about five. How great the evil must have been in America can be gathered from the immense efforts there of temperance societies and laws on drink; and the sensational figures cited by Dr. Smith (*Foods*, p. 428) on the wealth swallowed up there formerly by the use of spirits, on the lives lost by it, on the many widows, orphans, paupers, lunatics, and criminals made by it, represent a substratum of fact.—Some account of the fearful height which the abuse of alcohol has now reached in Switzerland and Belgium is given in *The Times*, 19 October, 1881, 27 December, 1882, 16 February, 1883.

us leave foreigners, and look at home. The matter is grave. That there is much drunkenness in Great Britain and Ireland is hardly denied; but as to how much, and whether increasing or decreasing beyond the fluctuations due to the greater or lesser earnings of the drinking classes, opinions differ. We can, I think, safely say this much, that drunkenness is one among several other dreadful evils which afflict our people; that it destroys thousands of lives, ruins thousands of families, is a frightful source of crime and insanity, makes vain the efforts of religion, cries to heaven for vengeance on those who foster it.* We can say also that among certain categories of persons, notably in the Royal Navy, it has of recent years undoubtedly decreased, and probably decreased also among the higher class of artisans (Samuelson, *History of Drink*, pp. 183-188), and in some rural districts (F. G. Heath, *Peasant Life in the West of England*, edition of 1880, p. 366-7, 377-386)†; that it has probably increased among

* Mr. Peck's calculation (*Contemporary Review*, Dec. 1876, pp. 30-32) that in England and Wales there are over half a million drunkards, and nearly two and a half million members of a drunkard's family (that is, one person in every ten) seems not to be exaggerated. The number of arrests for drunkenness, according to the Lords' Report (*Parliam. Papers*, 1878-79, x. p. 504) amounted in England and Wales to 88,361 in 1860, to 100,357 in 1867, to 131,870 in 1870, and to 203,989 in 1875. Naturally the cases of drunkenness indefinitely exceed the arrests.

† In regard to country population of England we must not forget the previous deterioration. Perhaps the worst period of their drunkenness was the seventh decade of this century, when the good practice of brewing at home had already decayed, and the licentious freedom of the beershops was not yet restricted—nay, since 1863 was utterly unbound. On the beershops I will speak anon. On brewing at home let us hear Mr. Kebbel (*The Agricultural Labourer*, 1870, pp. 146-147), who indeed despairs of bringing it back. "They [the poor] have got used to the beershop, and they will never go back to the brewhouse . . . if they could be persuaded to . . . it would be attended with the most beneficial consequences, as plenty of middle-aged men, who remember the system in operation, are ready to demonstrate. A farmer in the south, not more than five-and-forty years of age, assured the present writer that when he was a lad of seventeen [*i.e.*, about the year 1840] there was not a public-house in his native village, or within some miles of it; that every family down the village street brewed their barrel of beer periodically; and that the inhabitants used to meet at each cottage in turn, from six to eight o'clock in the evening, and play at cards for

women in private, while the dreadful spectacle of women drunk in public remains a national scandal and re-proach* ; that on the whole there is reason to suspect somewhat less of riotous drunkenness, somewhat more of quiet and of domestic excess.†

apples till the cask was emptied, when they went on to the next house. Drunkenness, he said, was unknown on these occasions ; and, from an intimate knowledge of the man, I am sure that he was not romancing. But this Arcadian state of innocence has passed away never to return. The knowledge of good and evil has come in the form of a public-house ; and Eden cannot be recovered." In some districts, indeed, the good old practice survives. "Cottage brewing," says the correspondent on agricultural distress in *The Daily News*, 22 Oct., 1879, "is prevalent to some extent in most counties where much malting is carried on, notably, I believe, in Suffolk, Essex, Norfolk, Nottinghamshire, and Shropshire. From two bushels of malt a labourer will brew a barrel of light but sound ale ; and persons who are familiar with inhabitants of villages in which the practice is common are warm in their eulogies of the comfort and happiness it confers upon labouring families. They are careful of that which they brew ; the children grow strong and healthy, and a refreshing and reviving pot of light wholesome beer in the home neutralizes half the temptation to excess at the public house." Mr. Clifford notices the saving by brewing at home in many cottages in Suffolk, *Agricult. Lock-Out of 1874*, pp. 214-215. The prevalence of 'the praiseworthy habit of cottage brewing' in the hilly parts of Lancashire and the West Riding is noticed in a letter to *The Times*, dated 21 July, 1881, by Mr. Joshua Fielden, who laments that when the malt tax was repealed in 1880, a license of six shillings was imposed on private brewers in a house worth less than £10 a year, *i.e.*, cottage brewers. Though not a quarter of what they paid before, the mode of payment is more visible and impressive, and thus has acted disastrously in discouraging brewing* at home.

* In London in 1879 the Police Returns show 32,893 arrests for drunkenness, nearly half, namely, 15,612, being of females. Liverpool shews much the same proportion : in 1875, out of some 22,000 arrests there for drunkenness, some 10,000 were of females. But this is no new phenomenon, as can be seen from the following figures of arrests for drunkenness 30 and 40 years ago.

Year.	England and Wales.		Ireland.		Scotland.	
	Men.	Women.	Men.	Women.	Men.	Women.
1841	48,909	26,359	17,669	10,751	5,280	2,405
1851	44,500	25,597	25,729	11,931	16,623	8,227

—Baer, *Der Alcoholismus*, p. 191.

† The 27th paragraph of the Report of the Committee of the House of Lords on Intemperance gives the following conclusions. (*Parliamentary Papers*, 1878-79, Vol. x. p. 508): "1. Recent legislation has had a

§ 171. The vice of drunkenness is an open one, its mischief obvious ; and war has been made upon it not only by various religions, and by private or religious associations, but also by law. In China the penalty for incorrigible drunkenness seems at one time to have been death (Samuelson, *Hist. of Drink*, p. 22). Total abstinence from intoxicating drinks was imposed by their religion upon Buddhist monks, and from wine at least, upon all Mohammedans. Drinking parties were forbidden by the Spartan and Cretan laws.

In England during the Middle Ages the efforts of the civil power had two principal aims, the one to encourage the wine trade with France and raise a revenue from the wine imported ; the other to insure to the people wholesome fermented drink at moderate prices. The law regulated these prices ; great

beneficial effect throughout the country by producing good order in the streets, by abolishing the class of beerhouses, and by improving the character of licensed houses generally. It is not, however, proved that it has diminished the amount of drunkenness. 2. Drunkenness has not increased in the rural districts of England and Scotland or in Ireland. 3. In the large towns and mining districts of the N. of England and S. of Scotland, after making allowance for the action of the police, the changes in the law and its administration, and other local or general causes, the statistics show that intemperance increased considerably during the five or six years of prosperity which followed the year 1868. There is, however, no evidence to prove that the country is, in this respect, in a worse condition than it was 30 years ago. 4. In some parts of the country drunkenness has increased among women ; as a rule the higher class of artizans are becoming more sober, and the apprehensions for drunkenness are becoming more and more confined to the lowest grades of the community." In the 36th paragraph recommending permission to town councils to conduct the liquor traffic themselves, the Committee says (*Ibid.* p. 515) : "When great communities, deeply sensible of the miseries caused by intemperance ; witnesses of the crime and pauperism which directly spring from it ; conscious of the contamination to which their younger citizens are exposed ; watching with grave anxiety the growth of female intemperance on a scale so vast, and at a rate of progression so rapid as to constitute a new reproach and danger . . . seeing also that all that general legislation has hitherto been able to effect, has been some improvement in public order, while it has been powerless to produce any perceptible decrease of intemperance,"—when they are willing to grapple with the evil, it seems hard to refuse these towns the necessary powers.—On Mr. Chamberlain's scheme, the willingness to adopt which by the Birmingham town council is here alluded to, see *infra*, § 174.

care was taken that just and full measure was given; and adulteration was punished with great severity (Bridgett, *Discipline of Drink*, ch. vi.). No direct means against drunkenness were used by the State, except that the local magistrates occasionally co-operated with the ecclesiastical authorities by closing taverns on Sundays (*Ibid.* p. 192). For 1,000 years the repression of drunkenness was left to the Church, and was carried on by the decrees of her Councils, by the exhortations of her preachers, and the action of her penitential system (*Ibid.* ch. viii., ix., and x.). In the sixteenth century, after the overthrow of religion, the spirit of the civil legislation changed. We see "the same, or rather a far greater desire, to raise revenue by means of the liquor traffic; and attempts are still made to regulate the prices; but, besides this, complaints are made of the spread of drunkenness, sumptuary laws are passed, licenses required for ale-houses and taverns, and at last penalties inflicted on the drunkard" (*Ibid.* pp. 184-5). In 1552 licences were required for selling ale, in 1554 for selling wine. Other Acts of like nature followed; and in 1606 a fine of five shillings was imposed for being drunk (*Ibid.* ch. xi.). This new character of drink legislation has not, I think, since been essentially changed. The regulation of prices has been abandoned, the repression of adulteration has become a mockery; but over one-third of the imperial revenue comes from taxes on fermented drinks; * the apprehension of drunkards is one of the main occupations of the police; † and the grant or renewal of licenses is an important function of excise officers and magistrates; though, by allowing a sort of real right to attach to certain premises, the authorities have forfeited much of their powers, and immense vested interests have arisen very difficult to disturb. ‡ The victims of drink and the

* As a rough approximation I think that in 1861, out of a total imperial revenue of 70 millions, some 20 came from fermented drink; in 1871 out of 70 millions some 26; in 1875 out of 75 millions some 32; in 1880 out of 81 millions some 29.

† See the figures given *sup.* § 170, note on p. 331.

‡ The following are the numbers of licenced drink shops in recent years in the *United Kingdom* :—

Year.	Population..	Public Houses.	Beer Houses.	Total.
1860	28,778,411	93,558	44,570	138,128
1870	31,205,444	98,066	44,501	142,567
1876	32,749,167	98,955	38,845	137,800

defrauders of the public revenue are punished ; many disorderly beer-houses have been closed by means of the Licensing Act of the year 1872 ; but the mass of those who kindle the fire of intemperance and make a profit from its ravages go yet, as they have gone so long, well nigh scot free.*

§. 172. Efforts indeed serious and praiseworthy have not been wanting in our country even in the modern period of drunkenness to keep under the evil. The inroad of gin, and the laws against it, have been well described by a recent historian (W. E. H. Lecky, *History of England in the 18th Cent.*, I. pp. 478-482). By the year 1736 so frightful was the drunkenness that even the sluggish parliament under Walpole was moved to strong measures ; a duty of 20s. a gallon was imposed on all spirituous liquors, and a license of £50 a year was required for selling them in less quantities than two

(*Parliam. Papers*, 1878-79, vol. x. p. 501.)—In *England and Wales* only, the licenses grew from 50,442 in 1829 (or one to every 270 inhabitants) to 94,135 in 1849, to 107,463 in 1859, and to 135,720 in 1869 (or one to every 149 inhabitants), according to Mr. Whittaker in the *Dublin Review*, July 1879, p. 24. But he forgets to tell us that the tide then turned. The absolute diminution in the licenses for beer houses since the Act of 1869, and the diminution relative to population in public-house licenses since the Act of 1872, has caused a great rise in the value of drink-shop property. The strictness of the magistrates had previously caused a similar rise in Scotland. (*Parl. Papers*, l. c., pp. 519-520.)

* In the five years ending 1877 the convictions for drunkenness in Liverpool amounted to 90,339, but the number of publicans convicted of supplying drink contrary to law only amounted to 289, or rather less than half of those against whom information was laid by the police. In London in 1876 there were 32,328 persons arrested for drunkenness, but only 186 convictions against drink houses (Samuelson, *Hist. of Drink*, p. 247). How at Liverpool the law is set at naught can be gathered from an interesting account of Liverpool public houses in *The Times*, 25 December, 1877 : the trade has been absorbed by large capitalists, and a single firm may own 20, 50, or 100 public houses ; the nominal publican supposed by law to be responsible is merely their servant ; they hold a blank transfer which he has signed, and thus if he is so incautious as to be found out breaking the law, he is instantly dismissed, the blank transfer is filled up with the name of a successor, who is equally a man of straw, and the forfeiture of the license, that naturally would ensue upon misbehaviour, is evaded indefinitely. The profits made from this business appear to be very great, and these 'pluralist-publicans,' as they are called, appear to have great local authority.

gallons. But these measures, which would have well nigh extirpated gin drinking, could they have been enforced, were over-strained. The consumption of spirits indeed sank from 5,394,000 gallons in 1735 to about 3,000,000 in 1737 ; but at the cost of violent riots ; and soon a clandestine retail trade arose very lucrative and very popular, till in 1742 no less than 7,000,000 gallons were distilled. Then the law swung from one extreme to the other, and in 1743 the duty of 20s. was reduced to a penny, the license of £50 was reduced to 20s. ; but neither drunkenness nor even clandestine selling yielded to this new mode of treatment. "In 1749 more than 4,000 persons were convicted of selling spirituous liquors without a license, and the number of private gin shops within the Bills of Mortality was estimated at more than 17,000 crime and immorality were rapidly increasing. The City of London urgently petitioned for new measures of restriction. The London physicians stated in 1750 that there were in or about the metropolis no less than 14,000 cases of illness directly attributable to gin." At last in 1751 wise and practicable measures avoided the excess of the law of 1736 and the defect of the law of 1743. Distillers were forbade either to retail spirits themselves or to sell them to unlicensed retailers. Debts contracted for liquors not amounting to 20s. at a time were made irrecoverable by law. Retail licenses, according to the locality, were only granted to £10 householders, or to traders who were subject to certain parochial rates. The penalties to which the clandestine retailer was liable were much increased : for the second offence three months' imprisonment and whipping ; for the third, transportation. And two years later the discretion of magistrates in issuing licenses was restricted, and public-houses were subjected to severe regulations. These laws were not beyond the capacity of the nation, and although not extirpating the chronic evil of spirit drinking and drunkenness, allayed the acute malady of the previous thirty years, and caused a notable diminution in the consumption of spirits, in drunkenness, and in disease.

In the present century, besides the closing of public-houses on Sundays in Scotland by the Forbes-Mackenzie Act of 1853, and in Ireland by the tardy Act of 1878, and the

English Licensing Act of 1872 (mutilated in 1874) seriously restricting the hours and conditions of sale, two notable attempts have been made to check drunkenness by the indirect method of favouring the consumption of milder alcoholic drinks. *First*, in 1830, under the Duke of Wellington, the 'Beershops Act' allowed certain excise officers to grant (with trifling restrictions) to any one for a small payment the license to sell beer. But while the consumption of beer after this Act increased, neither the consumption of spirits nor drunkenness grew less; nine-tenths of the so-called beer-shops illegally sold spirits as well; they were often dens of gambling and prostitution; the free-trade experiment had at last to be admitted a failure; and the disorderly liberty of the beer-shops, which had reached an intolerable maximum since the new Excise Licenses in 1863 (Kebbel, *Agricult. Labourer*, 1870, pp. 138-140), was repressed in 1869 and 1872. *Secondly*, the legislation of Mr. Gladstone in 1860 reduced the duties on foreign wine, and was intended to foster the consumption of the light wines which mainly come from France, instead of stronger drinks. At first, however, the importation of Spanish and Portuguese wines increased over 70 per cent., but then stood still or went back, while the increase in the importation of French wines gradually rose to tenfold; and this increased consumption has probably, leaving the lower classes unaffected, been to the middle classes a great help to become more sober (Samuelson, *Hist. of Drink*, pp. 182-183).

§ 173. Certain recent attempts abroad to check drunkenness by legislation deserve particular attention. In Sweden* the cheapness of spirits, and the facilities for making and selling them, were accompanied by wide-spread intemperance. To check this, an excise duty of nearly nineteenpence a gallon was in the year 1845 imposed upon spirits; small stills were abolished; and the local authorities were empowered to fix the number of licenses for selling spirits in each locality, these licenses to be sold by auction from time to time, and the

* See Chamberlain, *Fortnightly Review*, Dec. 1876; Baer, *Der Alcoholismus*, pp. 442-446; Swedish correspondent in *The Times*, 13 Sept. 1879; Samuelson, *Hist. of Drink*, ch. xiii.; *Parliamentary Papers*, 1878-79, Vol. X. pp. 512-513, 545-547.

proceeds to go to the local treasury. There was no legislation concerning beer, which was mainly taken by the middle and upper classes, and rarely a means of intoxication. A great diminution of drunkenness followed this Licensing Act ; many rural communes have altogether refused to grant licenses, and in 1876 there were but ten in the whole province of Gothenburg. Not as though spirit-drinking, or even drunkenness, was at an end among the peasantry ; for many flock into the towns to drink, and also spirits are bought wholesale and kept for home consumption. Still there has been a reformation ; and the consumption of spirits, which in 1854 was 21 litres a head, sank to 10 litres in 1876, and has since still more declined. In the towns, however, the legislation of 1854 seems to have availed little against drunkenness, till a peculiar manner of working it was discovered. In 1864, at Gothenburg, a body of philanthropical citizens formed a company with limited liability, to purchase all the drink-shop licenses of the town, to conduct the business in the sole interest of sobriety and morality, and not to divide any profits among themselves, but to pay them into the town treasury. As no profit has been aimed at, all competitors have been easily outbid ; the drinking-shops are not more numerous than is required by convenience ; and are all also eating-houses ; moreover, the managers of these refreshment rooms—for they ought not to be called drink-shops—are allowed to profit by the sale of food and of malt liquors, but not by the sale of spirits ; and thus escape the strong temptation to sell spirits to young people, or to those who have already drunk enough, or to incite intemperance by the presence of gambling, bad women, obscene songs, and the rest ; while adulteration is hardly possible. The benefit to the town finances has been great ; the diminution of drunkenness considerable ; and there is a presumption of the success of the plan from its popularity and its spread to almost every other town in Sweden, and to many in Norway.*

* The apparent revival of drunkenness in Gothenburg—the arrests, which had fallen from 2,070 in 1865 to 1,320 in 1868, numbered in the four years from 1872 to 1875 respectively 1,581, 1,827, 2,234, 2,490—can perhaps be quite accounted for by the influx of country people unable to obtain spirits in their own neighbourhood, and coming whenever they

In the State of Maine a more drastic remedy was sought by the absolute prohibition, in 1851, of the sale of all intoxicating drinks, except for ecclesiastical, medicinal, chemical, or mechanical ends, and even then only by State officials; and such drinks could only be imported or manufactured by a man for his private consumption. Cider and native wine were alone exempt. Those who broke the law were to suffer two months' imprisonment in the county gaol and pay 1,000 dollars. Even persons found drunk in their own houses were liable to thirty days' imprisonment. About 1854 an analogous law was passed in the State of Massachusetts. The fate of the two laws has been different. In Massachusetts neither the sale of drink nor the drunkards to be arrested grew less; the failure of the law was recognized; a committee recommended the consumption of cider and small beer; and a new law in 1875 introduced the plan of licenses. Local authorities may indeed refuse to grant any; but if granted they must be according to a definite tariff. No one who is not a brewer may be charged more than 150 dollars (£30) for a license to sell malt liquors, cider, and light wines (containing not more than 15 per cent. of alcohol) to be drunk off the premises. But he may be charged up to 250 dollars (£50) if even these lighter beverages are to be allowed to be drunk *on* the premises; and up to 1,000 dollars (£200) for a license so to sell strong wines and spirits. Stringent regulations concerning the hours of sale, the decency of the premises, the purity of the drink, the supply of food as well, the non-delivery to various classes of persons (minors and notified sots), were also part of the law. In Maine the prohibitive law remains in force, and appears, after so long a trial, to be still approved by most of the inhabitants. In many small towns, and in the country villages, the traffic in intoxicating drink has been stopped and all open traffic in the larger towns. In these there is, indeed, much surreptitious selling; and there must be many drunkards if 150 could be reclaimed in a single town within six months by a Temperance Society, according

can into the town to get them; not to speak of greater strictness of the police, or of the great increase of earnings through the extraordinary harvests of those years.

to the testimony of a teetotaler in the year 1875-76. But criminal laws can only hope to check, not to extirpate crime; the Maine liquor law is no dead letter; and juries convict on the charge of liquor-selling as readily as on the charge of stealing. Let us add that in most other North American States, including Canada, the sale of alcoholic drinks requires a license, or is quite forbidden, or the power to issue license or prohibition is conferred upon each special locality ('local option').*

§ 174. Temperance societies and religious preaching have also in this century been active agents against drunkenness, and have shewn that for a time they can effect an immense reformation. Thus in the United States, where they first became important, and this first during the third decade of the century, the importation of spirits sank from over $5\frac{1}{4}$ million gallons in 1824 to under $1\frac{1}{2}$ in 1830; in 1834 the number of temperance societies was some 7,000, and 1,000 ships were sailing without spirits on board (Samuelson, *Hist. of Drink*, p. 240). In Ireland, between 1838 and 1842, the consumption of spirits sank from about $12\frac{1}{4}$ million gallons to about $5\frac{1}{4}$ owing to the temperance crusade preached by Father Mathew; and though the excise on spirits was lessened by £750,000, the deficiency was more than covered by the increased yield of other taxes on consumption (Roscher, *Nationalökön.* § 236). In England, though no such striking figures can, I think, be shewn, the numerous temperance and total abstinence societies have for fifty years done much with much zeal, and may now possess over a million members; and in Sweden, from 1830, in Germany, from 1837, temperance societies have in many districts worked wonders.† Still, as long as external facilities for

* On the American liquor laws see Samuelson, *History of Drink*, pp. 216-228; James Henderson, *Contemporary Review*, May, 1877, pp. 1,060, 1,061; *Liquor Laws of the United States*, New York, 1878 (British Museum press-mark 6,614, aa); *Dublin Review*, July, 1879, pp. 28-31; Baer, *Der Alkoholismus*, p. 425 seq.; Justin MacCarthy, *Fortnightly Review*, August, 1871.

† In Upper Silesia a wonderful reform was effected by Father Fietzek and the temperance league he established in 1845. By the end of the year some 300,000 Upper Silesians had joined it, and 84 distilleries had been given up, besides 206 doing no work. Previously the drunkenness

drunkenness remain, the inclination and the temptation are constant, the enthusiasm of abstinence is likely to be fleeting. The Bishops of Ireland, in 1873, in spite of all Father Mathew had done not so long before, had to speak of drunkenness as one of the greatest evils of the day (Bridgett, *Discipline of Drink*, p. 232). In Germany, after 1847, the temperance zeal generally grew cold. Most of the States of North America, though temperance societies had among them so brilliant a start, have since resorted to legislation against drinking. The fanatical revival in 1874 known as the women's whisky war, when the drinking-places were surrounded by troops of women, singing and praying till the seller renounced his trade, although it immediately resulted in some 450 drink-shops being closed in Ohio and Indiana, was of a nature to discredit all temperance associations. Moreover, where 'total abstinence' is made into a religion of itself, as among the 'Sons of Temperance' in America and the 'Good Templars' in England (*Ibid.* p. 202), it is likely that many of the members are those who have no natural inclination toward drunkenness, including many who would be the better for some alcoholic drink; and thus teetotalism may get much more credit for averting drunkenness than it deserves; it may discredit intemperance among certain ranks of society at the cost of discrediting temperance, and even religion, among others; and of all such associations ('total abstinence' or 'teetotal' in particular, but also

had been terrible. The spirit shops, as a rule, were in the hands of Jews, a phenomenon observable also in Russia or parts of it. Recently there has been a relapse since the persecution of the Catholic Church, begun in 1872, and the triumph of the Jews. (*Christlich-soziale Blätter*, 1881, pp. 308-312.)—An interesting account of modern temperance societies, with many details in particular regarding the United States, the United Kingdom, Sweden and Germany, is given by Dr. Baer, *Der Alkoholismus*, pp. 382-424. But this good German physician, who, unlike many in his position, is uniformly respectful toward religion, falls here into the delusion that temperance societies could thrive as patriotic-philanthropic medico-educational societies, without any religious character; and wishes them to be so; when in reality they require from the very obligations they impose to be penetrated with a religious spirit, whether belonging to true religion and the Christian principles of humility and asceticism, or the repulsive delusions of domineering and self-righteous fanaticism.

simple temperance associations, as those of Germany), we can say that they will either be feeble, slack, and inefficient, or else must be founded on enthusiasm, which is only fitly to be controlled, or on grace, which is only to be obtained within the Catholic Church.

§ 175. Sufficient has now, I think, been said to enable us, in regard to the use of intoxicating drinks, to understand and assent to the following conclusions:—

A. False and detestable is the doctrine taught by many heretics in the early ages of Christianity, and often since, that fermented drinks are in their very nature an evil, or come not from God's hands but from some Evil Principle, and that to take them is of itself sinful.* Worse than useless, therefore, is the abstinence from strong drink on the ground of its being unclean, or when joined with scorn and condemnation of others who abstain not, or when made the foundation of a sort of religion.†

B. Scandalous and heretical and, moreover, ridiculous are the attempts to deny the use and approval of fermented drinks in both the Old and New Testament.

C. We must not be confused by the superstitious abuse of an abstinence from all fermented drinks, or forget how great is the merit of such abstinence, if in the right spirit and for the right ends of penance, or of avoiding the temptation to excess, or of giving an heroic example to others who are in constant danger of drunkenness.

D. It is an error to say, like Adam Smith (*Wealth of Nations*, Bk. II. Ch. V. p. 161), "that it is not the multitude of alehouses . . . that occasions a general disposition to

* See the first chapter of Father Bridgett's *Discipline of Drink*, where several interesting citations are given from the Fathers, from St. Clement of Alexandria in the second century onwards, against the Encratites, Gnostics, Manichees, Albigensians, and other heretics.

† "Our Lord pronounces those blessed who hunger and thirst after justice, not those who drink water and despise their neighbours." (St. Gildas, *apud* Bridgett, *l. c.* pp. 19-20.) "This Severianus, who abominates both wine and marriage, shews himself by the one blasphemy unworthy to have been born, and by the other unworthy of the chalice of the Lord. But Christ blessed both, by his presence at the marriage-feast of Cana, and by changing water into wine." (Nicetas, Bishop of Constantinople in the ninth century. *Ibid.* pp. 21-22.)

drunkenness among the common people ; but that disposition arising from other causes necessarily gives employment to a multitude of alehouses." For the disposition to drunkenness may be checked if the temptation is not made too strong by the ease of getting drink. Reason teaches us that if we are to keep upright we must avoid the occasion of falling ; and that each fall makes further resistance more difficult ; and we know from observation how often the introduction of some intoxicating drink or the opening of a drink-shop has been followed by an outbreak of drunkenness which would not have broken out but for this opportunity. It is true that when once any sort of intoxicating drink can be got with a certain facility, any further multiplication of public-houses is not necessarily followed by increased drunkenness ; * and the multiplication may be, as

* On the relation of drunkenness to the number of drink-shops, see *Parliamentary Papers*, 1878-79, Vol. X. pp. 505-507. We can say that a great number in a given place implies excess, or they could not thrive ; but that a small number by no means implies sobriety. The following table, if correct, shews that in the present state of England drunkenness is not at all in proportion to the number of public-houses. (*Ibid.* p. 506.)

	Northern Towns.	Northern Counties.	Southern Towns.	Southern Counties.
Average drunkenness per 10,000	159	72	44	23
Average number of public-houses per 10,000	59	55	69	60

The Lords' Committee go on to report (p. 507) " that in large towns, while the public-houses have decreased in number they have increased in size and in the amount of accommodation they afford. It appears, moreover, that a great number . . . have been converted into ' vaults ' or ' gin palaces,' which are mostly spirit-drinking places, where people stand to drink, the drink being served over the counter : " a modern and mischievous innovation.—But none of this evidence is in the least contradictory to the other evidence, which shews the absence or insignificance of drunkenness in rural districts or small towns where there are no drink-shops at all, as in over 1,000 parishes in England and in a large district of county Tyrone, according to Sir Wilfrid Lawson in the *Nineteenth Century*, March, 1879, p. 414. F. Peek, in the *Contemp. Rev.* Dec. 1876, p. 37, gives the example of Bessbrook, Saltaire and Romsey, three places free from drink-shops. A correspondent, cited by F. G. Heath, *Peasant Life in the West of England*, edit. 1880, pp. 374, 375, says that in agricultural districts remote from a public-house, the labourer is fairly temperate, and only yields to habits of excess when nearer a town, and just according to the facilities of getting liquor.

Adam Smith says, the effect, not the cause of excess. But this is no proof that a serious check to drunkenness would not be given by a serious check to the temptation; not to speak of a multitude of drink-shops rendering the needful supervision well nigh impossible.*

E. On the other hand, it shews an ignorance of the great complication of causes and effects in social life, and a want of historical logic, to attribute simply to the use of alcohol the greater part of crime and suicide, of immorality, poverty, and insanity, besides exaggerating the figures of mortality and expenditure. Crime may be the cause as well as the effect of drunkenness; suicide and drunkenness may be the joint effects of a common cause, or set of causes, and to say straight off that an increase of suicides accompanying an increase of consumption of alcohol is a proof that those extra suicides were caused by that extra consumption, is to display an ignorance of how to reason. Drunkenness most truly is a frequent cause of prostitution, poverty, and disease; but also, conversely, women already fallen may find in drink the solace for their shame; the ill-fed, ill-clad, ill-lodged for their privations; the unhealthy for their discomforts. We must not think that all who die from alcohol would have lived long and healthy lives without it. We must not say, unless we are to count some of the money twice over, that the 'national drink bill' in 1880 was some £122,000,000, when about a fifth of the sum, if not more, was paid as taxation, and thus was spent on government, not on drink. For even in a good cause we must be reasonable; and though in modern England drunkenness is an active cause of crime

* Adam Smith, in another passage (Bk. iv. ch. iii. p. 218), sophistically likens the trade in drink to the trade in meat or clothes, so that if there is to be free trade for these there ought to be the same for drink. And he rashly generalizes in materialistic fashion on the drunkenness of northern and tropical countries in contrast to the sobriety of the intermediate wine countries. Those who oppose all reform or regulation of the traffic in strong drink with the sophistical phrase: 'men cannot be made sober by Act of Parliament': are scarcely in a condition to be reasoned with. It is sufficient to observe that there are many laws which make it much easier for men to be sober, and that those who argue as aforesaid, might about as reasonably demand the abolition of the whole criminal law on the ground that men cannot be made honest, moral, and peaceably disposed by Act of Parliament.

and misery, there are other causes that act with it and beside it.* Of course it would be equally foolish to look only to those other causes, to say, for example, as Liebig did (*Chemische Briefe*, 1865, p. 339, *apud* Baer, *l. c.* p. 317), that "spirit-drinking is not the cause but a consequence of poverty;" only in modern England we are less likely to fall into this excess than into the other.

§ 176. F. In regard to measures against the abuse of alcohol, we must distinguish times, places, peoples, and classes. An indiscriminate crusade against all intoxicating drinks for every one everywhere, is foolish: the extirpation of alcohol would be mischievous, as is plain from what has been said (§ 164) on its use. Nevertheless there may be cases, notably those of barbarous people under the dominion or influence of Europeans, where utter prohibition of every kind of alcoholic drink is called for, and the law should refuse to distinguish the drinkseller from the assassin. Such cases will be certain and many if the prohibition is limited to spirits, for it is spirits and not milder drinks which have brought so many weak races to ruin. Again, if a man recommends the laws of Maine or Sweden for adoption in England, he must first shew that these laws are equally fit in a country with a dense population and abounding in large towns, like England, as in Sweden or Maine, in both of which the population is scattered and large towns are few. We must examine moreover whether the country is a land of vineyards, of wine-palms, or of neither; whether spirits are known as a common drink or not; what are the conditions of labour, the character of recreation, and of home life; what is the nature of the government and its power of enforcing the laws; what the condition and sort of religion. And many other special circumstances must be considered, of which I will give an example. The United Kingdom, although hampered by many difficulties in regard to temperance legislation, has this

* One of the great merits of Dr. Baer's work on Alcoholism is that he appreciates the difficulty of telling how much is cause and how much is effect, and again how much of a given effect is due to each of several joint causes. See his careful inquiry *Der Alcoholismus*, Part II. Abschnitt II. and III., into the connection of alcoholic excess with disease, mortality, suicide, poverty, prostitution, crime, and insanity.

advantage, that its distilleries are very few and on a large scale, and thus spirits can be made liable to a heavy tax that in some countries would defeat its object by giving rise to clandestine manufacture (Baer, *Der Alcoholismus*, p. 470). In the canton of Bern, on the contrary, there are over 11,000 small distilleries; heavy taxation could scarcely be enforced as long as they exist; and the land is deluged with cheap and bad spirits abounding in fusel oil (*Ibid.* pp. 172, 173). The same legislation is plainly not required for England as for Bern, and the latter State ought to imitate the example of Finland in 1863, and abolish the right of every petty proprietor to distil spirits (*Ibid.* pp. 208, 209).*

G. We must distinguish the varieties of alcoholic drinks, and not confound them in one common vituperation. Shakespeare paints the ridiculous Falstaff exceeding in strong wine—this intolerable deal of sack; but makes his hero Prince Henry, when exceeding weary, desire the solace, not of wine or strong ale, but of so weak a composition as the poor creature small beer. Hogarth, no inaccurate observer, depicted on canvas the impressive contrast between Beer Street and Gin Lane. Beer in Germany has been regarded as preventing rather than fostering intemperance, and is drunk by members of Temperance Societies who eschew all spirituous liquor.† Swedish legislation has been aimed

* The case of beer, be it noticed, is very different; it is presumably a good, not an evil, when every peasant brews at home (*sup.* § 170, note pp. 331-2), and instead of despairing, like Mr. Kebbel (*Agric. Labourer*, pp. 146-7) of the restoration and preservation of cottage brewing, we should strive to promote this good end, and thus, for example, to get the tax on cottage brewing repealed. Notice that home brewing has the great advantage of being a field for the employment of women at home; in mediaeval Scottish burghs the brewing and selling of ale seems to have been exclusively a female occupation (Bridgett, *Discipline of Drink*, p. 121); and in modern England, or at any rate in parts of England, it is the housewife who brews.

† In the principality of Osnabrück the number of distilleries (in, I think, the third decade of this century) was perceptibly lessened by the temperance societies, while the consumption of beer rapidly rose to twentyfold (Roscher, *Nationalökön.* § 236, note 8). The members of a German Catholic Temperance Association, approved by the Pope in 1851, bind themselves "to abstain from all distilled liquors, and to be sober in the use of fermented ones." (Bridgett, *Discipline of Drink*, p. 255.)

against guilty spirits, leaving beer as innocent to go free. In Massachusetts the Committee on the Prohibitive Law previous to 1875 spoke of the 'fatal mistake' of prohibiting the sale of cider and light beer, and recommended that the law should encourage the consumption of these liquors in the true interest of temperance, as Mr. Samuelson tells us (*Hist. of Drink*, p. 222); and he observes (*ibid.* p. 70), "it is not the liquors which are consumed with solid food that are the operating causes of national or individual drunkenness. The Frenchman does not get drunk on red wine, nor the German on lager-bier. Absinthe and schnapps are the destructive agents there, just as gin, and not Barclay's stout or Bass's ale . . . in England." Only we must put bad beer on the black list as well as gin, beer full of salt through careless manufacture or unscrupulous adulteration, and beer mixed with spirits (see Dr. A. J. Bernays, *Contemporary Review*, Nov. 1878, pp. 702, 703). Whereas for good beer we can agree with the saying of Dr. Baer in regard to countries too cold for vineyards: "*Das Bier ist der grösste Feind des Branntweins.*" that is, the greatest enemy of spirits is beer. History and common sense, chemistry and medicine, all bear witness to the variety in the effects of different fermented drinks according to their different character, the proportion of alcohol (§ 165, note p. 319) being perhaps the chief but by no means the only cause of their difference (§ 167, *ad f*); and we can reasonably say that in the lands of vineyards the *vin du pays* or wine of the district, that in more northern regions unadulterated mild beer, cider and mead, that perhaps in the tropics fermented palm juice, are fit popular drinks, whose use far outweighs their abuse.*

* The irreconcilable opponents of alcohol, as Mr. T. P. Whittaker (in the *Dublin Review*, July, 1879, pp. 19-20), urge that a little alcohol excites a craving for more, that a light alcoholic drink leads the way to a stronger drink, or to ever-increasing quantities of the light one, and that experience shews the futility of favouring light drinks with the view of checking drunkenness and the consumption of strong drinks, witness the increase in the consumption of these after the Beershop Act of 1830, and the Wine and Spirit Acts of 1860 and 1861. But such reasoning is full of fallacy and mischief. What is true of a few, that the use of little alcohol in a mild drink will lead to excess (§ 166 *ad b*) is extended, in defiance of physiology and experience, to all; and the glass of mild beer

H. We must look as far as we can at all the results of measures against drunkenness, not at some only. A direct good from a drink law may be well nigh or quite outweighed by indirect and unintended evils. Sometimes a law is patently mischievous, as the Gin Act of 1736 with its crop of riots, false information, and illicit manufacture and sale (§ 169). More often it is difficult to estimate the weight of incidental disadvantages, such as the increase of desperate and criminal drinking and selling; the introduction of spirits and drunkenness into the family circle; the spread of worse habits like opium-eating or chloralism (*infra*, § 227) †; the attraction of population from the rural districts where the law can be thoroughly enforced to the towns where it can be in part evaded; the demoralization of municipal functionaries; power put into hands that will use it badly with consequent petty tyranny, false witness, injustice and corruption, not to speak of political disaffection. But though it is difficult to make an estimate of such drawbacks, make it we must.

§ 177. J. In modern England some or all of the following or of claret is made the fatal precursor to intemperate and untimely draughts of dry sherry or fiery gin. The significant examples of Germany, Sweden, and Massachusetts are passed by, and we are referred to two measures in England which are anything but conclusive. The rational advocates of light drinks in England are no advocates of so-called free trade even for these. The Act of 1830 did not fail because it favoured mild liquor at the expense of strong. It failed because there was no fit control of beershops, no fit measures against adulteration, no fit repression of the abuse of spirits, which, in fact, were sold at most of the beershops; and those encouraged to get drunk on bad beer may likely enough have soon craved and gratified their craving for a stronger means of intoxication. But this proves nothing against the superintended sale of good beer or light wine. The legislation of 1860-61 cannot be said to have wholly failed (§ 172); but if it had there is the ample and obvious reason of accounting for the failure in the fact of the ease of getting strong drinks, and the comparative cheapness of wines strongly charged with alcohol, or of compounds which are wines only in name, but in reality German potato brandy duly diluted, coloured and flavoured.

† In Japan it is said the law allows intoxicating drinks for all classes with the aim of averting the use of opium, and succeeds in its aim (Baer, *Alcoholismus*, p. 148); in parts of Tartary where to drink is a capital crime, a worse substitute is found in opium and other narcotics (*ibid.* p. 148).

measures might be applied as direct means against intemperance.

(a) A reform in the composition of the licensing body: every distiller, brewer, wine merchant, publican, and any one interested in any house of business connected with the sale of intoxicating liquors, to be *ipso facto* excluded (*cf.* Lords' Report, *Parliamentary Papers*, 1878-79, X. pp. 527, 560, No. 16); and perhaps on each licensing board should sit a paid Government inspector with a certain right of veto on renewal of licenses;* nor should there be an appeal concerning town licenses to county justices (*cf.* *Ibid.* p. 518).

(b) A reform in the person of the sellers: none to be brewers or distillers, or interested in a brewery or distillery; serious requirements of previous good conduct for any one licensed to sell drink to be consumed on the premises; such a person to be the unincumbered owner of such premises, so as to limit the interests to be dealt with (not to have a brewer, distiller, ground landlord, house landlord, and mortgagee, all interested in a given drink-shop over and above the publican himself), and to avert men of straw being made drink-sellers (*cf.* Lords' Report, *l. c.* p. 518, and *supra*, § 171, note p. 335).

(c) A reform in the place of sale: all, or at least the stronger class of alcoholic drinks, when drunk on the premises, only to be sold in rooms of fit size and ventilation, where there are *bond fide* facilities for making a meal: each drinking-shop to be an inn or eating-house. It is so in Sweden; it is so, by law at least, in Massachusetts, where every license for drinking on the premises must also hold a license as innholders or common victuallers, and is forbidden

* In the province of Ontario the licensing authority for each city, each county, or each electoral union of counties (if I understand), is composed of three unpaid commissioners annually appointed by the Lieutenant-Governor in Council, and helped by a paid official inspector appointed by the same authority and on whom the enforcement of the license regulations practically devolves. (Henderson, *Contemp. Rev.* May, 1877, p. 1070.) Mr. Henderson urges for England also, as a measure of high value, the appointment of independent inspectors to issue the licenses and to see that the conditions on which they are granted are really observed. (*Ibid.* p. 1071.)

to keep a public bar ; it is so in Ontario, where such a license is only granted to houses of entertainment which are well-appointed and sufficient eating-houses, with the appliances necessary for daily serving meals to travellers. (James Henderson, *Contemp. Rev.* May, 1877, pp. 1066-1069). Perhaps as a check to the double evil of intemperance and licentiousness fostered by the refreshment counter or bar at railway stations, theatres, and other places of resort, the law should forbid any young woman serving at any such counter if intoxicating drinks are sold there.

(d) As an obvious corollary to suggestions 'b' and 'c,' no transfer of licenses from one person to another, or of drink-shops from one place to another, or any notable alteration of premises should be allowed without the consent of the licensing body. (*Cf.* Lords' Report, *l. c.* pp. 518, 519, 530, 531).

(e) A considerable increase in license duties. This is recommended by the Lords' Committee (*Ibid.* pp. 519, 520), and justified by the great increase in the value of licenses through recent legislation which has created, or rather has narrowed the monopoly of the sale of drink in the hands of possessors of certain premises. The proceeds of the extra charge for licenses might perhaps be applied in part to compensate those who lost much by the application of the reforms in the place of sale, notably by the abolition of drinking bars.

(f) A reform in the time of sale. In the actual state of the law the mischief of public-houses being open to a late hour seems incontestable, as well as the benefit in Scotland and Ireland of Sunday closing ; and we should support Sunday closing in England, and the hour of six for closing on Saturdays, ten on other week days. (*Cf. Ibid.* pp. 498, 499, 520-522.) But if the other reforms here recommended were adopted, the importance of early and Sunday closing would be less, and perhaps outweighed by other disadvantages. An exception must at all times be made for a *bonâ fide* traveller, and there must always, I think, be some difficulty in legally fixing his character, though the deficiencies of the present English law on this matter could assuredly be much amended. (*Cf. Ibid.* pp.

522, 523. F. Peek, *Contemporary Review*, December, 1876, pp. 39, 40.)

(g) A reform in regard to the person of the buyers. Not merely a prohibition to sell drink to a minor, or a person drunk, or a known drunkard, but a Civil Damage Act as in several American States, enabling those who suffer from the habitual drunkenness of persons connected with them by certain ties, as marriage, near relationship, or employment, to recover damages from drinksellers who supply these persons with drink; and also making a publican who has allowed any one to get drunk on his premises liable for all damage this person may do while drunk.* Such an Act might dispense from further legislation on the difficult matter of how to deal with habitual drunkards.†

(h) Legal measures to stop both the payment of wages in fermented drink—on the abuse of beer payments in some parts of rural England and cider payments in others see Fred.

* In Massachusetts, if one drunk commits an assault or injures property, whoever furnished him with liquor in violation of the law is liable to the same action as the person drunk is. Also the husband, wife, parent, child, guardian, or employer of any person who has acquired habits of drunkenness, may give written notice to any licensee not to sell or deliver intoxicating liquor to such person, and may recover from the licensee, if he so sell or deliver within twelve months, or even permit the person to loiter on his premises, from 100 to 500 dollars (£20 to £100); nor (I understand) is any proof required of loss sustained except where the prosecutor is the employer of the drunkard. (Henderson, *l. c.* p. 1067.) In Vermont, where the sale of drink is prohibited, if a man's drunkenness result in his death or disablement, and consequent loss to any one depending on him for means of support, the drinkseller is liable for all such loss (*ibid.* p. 1069).

† Much information on the treatment of habitual drunkards, and in particular on the *inebriate asylums* of America, is to be found in Baer, *Der Alcoholismus*, pp. 502–527. That a man should be able, if he wishes, to be kept from all alcoholic drink for a certain period by main force, is what he can fairly claim in self-protection. That any criminal whose offence is due to habitual drunkenness be shut up in a temperance reformatory for a time that will give him the chance of being cured of his bad habit, seems a fit measure of criminal legislation. But that a man who is neither willing, nor a criminal, be liable to be shut up in an inebriate asylum for habitual drunkenness is a step that by no means follows from the two preceding ones; and other means like the *curatela prodigorum* in Roman law, can be found to prevent a sot squandering the family property.

Clifford, *The Agricultural Lock-out of 1874*, pp. 27, 30, 31, 230–232, 304, 305; T. E. Kebbel, *The Agricultural Labourer*, 1870, pp. 27–28; F. G. Heath, *The English Peasantry*, edit. 1874, pp. 54–56, 86–89, 262, 263—and also the payment of money wages within the precincts of a public-house, a frequent practice of small employers (F. Peek, *Contemporary Review*, Dec. 1876, p. 35), and the habit of treating customers so as to induce them to buy (*Ibid.* p. 34), and similar abuses. To pay wages in the shape of intoxicating drink and in any shape if paid in or about a drink-shop, might be made a criminal offence; and all contracts or payments made under the influence of drink or within the precincts of a drink-shop might be made utterly void. But it is not for me to fix the precise methods of repression, a task for which it is the legal profession that is competent.

§ 178. (j) A reform in the kind of drink sold. Not merely a serious Adulteration Act against the abominable contrivances of fraud and covetousness, as putting salt into beer, but also the utter prohibition of many noxious kinds of alcoholic drink. Thus no spirits should be sold for consumption which has not been kept in some public or inspected store-house (in bond) at least twelve months (*cf.* Lord's Report, *l. c.* pp. 527, 558). No admixtures should be allowed which make uncertain the alcoholic strength of various liquors, an uncertainty which is a great stumbling-block in the way of temperance and yet removable by legislation (See Dr. A. J. Bernays, *Contemp. Rev.* Nov. 1878, pp. 703, 704). An end should be made to the "heavy, unwholesome beer, strongly charged with alcohol, such as . . . now often supplied" (Lords' Report, *l. c.* p. 514), and to the abominable mixtures sold for beer, described in the next note. And perhaps measures might be taken against the 'patent still' and the production of 'silent spirit' described above (§ 167, note), and against the concocted 'dry sherry' denounced by Dr. Radcliffe (*Contem. Rev.* Jan. 1879, p. 351).

(k) Among legal alcoholic drinks more distinction made than at present in favour of the milder kinds. Heavier taxation (custom and excise duties and licenses to sell) upon spirits and strong wines in comparison with light wines, beer, and cider. No taxation at all upon small beer if possible;

and that brewing at home may be favoured to the utmost, entire abolition of the six shilling license to brew levied on cottager brewers by the Act of 1870. (*Cf. sup.*, § 170, note pp. 331-2; § 176, note p. 346.) Moreover, less severity as to the time and place of selling the lighter drinks, and as to the person and number of persons selling them, and permission to sell them in much smaller quantities at a time for consumption off the premises. It is time at last to restore beer to its right place and by making it abundant and cheap, wholesome, light, and pure, to make it our grand ally against intoxication.

(*l*) A reform in the penalties for illegal selling. Serious and minimum fines for first offences of some sorts; forfeiture of license and imprisonment for a repeated offence; publication of every conviction and sentence on the premises so as inevitably to catch the eye of every customer; adulteration to be a criminal offence to be condoned by no fine, and to be treated as a brutal assault on person and property;* the entry of intoxicating liquor under some other head in his

* When in Camberwell the public analyst found one specimen of malt liquor contained 82·60 grains of salt per gallon, enough to induce thirst and encourage drunkenness, he "ventured to obtain a magisterial decision and a penalty reduced at the request of Mr. M. . . . from £10 to £5, together with costs."—*Times*, 29 Nov. 1877. Some persons might think it well if it were venturesome, not to prosecute for selling, but to sell such diabolical drink, and if the pillory and the whipping post were the penalties, not to be reduced at any one's request.—The adulteration of beer is peculiarly mischievous inasmuch as it converts an ally into an enemy of temperance. Mr. Kebbel, *Agricultural Labourer*, 1870, pp. 143-145, rightly emphasizes the great influence of the quality of beer sold on the sobriety of the labourer. "The abominable mixtures which are sold for beer in many village inns not only stimulate instead of quenching thirst, but are so concocted as to produce immediate stupefaction. The peasant who goes in for his half pint of beer on his way home . . . feels, when he has swallowed it, just as if he had been drugged, sits down helplessly in a corner, and continues to drink almost mechanically . . . or . . . if . . . not . . . the small quantity he has taken has such an effect upon him, that if his master or the clergyman meets him . . . he fancies him intoxicated . . . and one more character is gone. The keepers of these houses have been known to lament the necessity which compelled them to vend such stuff. But they have no choice. The house is a close house; that is to say, it belongs to some small brewer in the neighbouring market town, and the publican is little more than his agent. In London we believe the adulteration of beer mostly begins in the public-house; elsewhere it is com-

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bill by a shopkeeper to be punished by immediate forfeiture of his license (*cf.* Lords' Report, *l.c.*, pp. 516, 517) ; giving drink to police officers to be severely punished as one of the most pernicious forms of bribery.

(*m*) Lastly a great reform in the means of executing the law. Assuredly where good and cheap alcoholic drink can be lawfully obtained and where the duties on strong wines and spirits are not so high as to make irresistible the temptation to clandestine sale, the enforcement of measures like the foregoing is not too hard a task for a strong government. Where there is a will there is a way ; and the absurd deficiencies and quibbles of law rendering inspection and conviction difficult, are not a part of the nature of things. (See the Lords' Report, *l.c.*, pp. 522-527.) All convictions *can* be endorsed on the license unless it be altogether forfeited ; in any place that is not a private dwelling-house it *can* be made unlawful to keep drink that it is not lawful to sell ; the delivery of drink *can* be made *prima facie* evidence of sale, as in Massachusetts (*Contemp. Rev.*, May 1877, p. 1007) ; premises *can* be made to include the immediate surroundings, as in Ohio (*Ibid.*, p. 1003) ; drink-shops *can* be lessened in number in order to facilitate inspection. And much else might be suggested,* but I have already trespassed enough on the domain of police administration.

§ 179. The foregoing reforms or others of like sort are a more or less urgent need in every county and every borough of England. It remains to notice two other proposals, one known as Mr. Chamberlain's scheme, the other as the Permissive Bill. The first is an adaptation of the Gothenburg plan (§ 173) to the circumstances of England, and in brief would enable town councils to acquire all the drinking places in their town and themselves conduct the trade in the interests of sobriety. The great expense of such a scheme has been justly objected, and the capacity of town pleted in the brewery . . . little or no effort ever is made to bring home this offence to the perpetrator."

* What mockery, for example, to license a grocer to sell spirits for consumption *off* the premises only, and yet as in Ireland at the time of the Lord's Report (*Parl. Papers*, 1878-79, x. p. 529) to allow him to sell them in small quantities and in open vessels, and to erect screens to conceal a part of his shop !

councils for the functions to be entrusted to them has been questioned ; the absence of any such measure in America (Henderson in *Contemp. Rev.*, May 1877, p. 1071) the experimental ground of drink legislation, is significant, and there are other objections. Still, were this scheme the only alternative to the present evils, it should be warmly supported ; for some improvement in some places is better than no improvement anywhere. Whether, as matters really stand, we should support it, depends on the practical question whether its adoption would help or hinder general measures of reform. And this I leave others to decide.*

The second measure, namely the Permissive Bill or Local Option would in brief allow a certain majority of the rate-paying body to prohibit utterly the sale of every sort of alcoholic drink within the limits of their borough or parish. But leaving other objections, the dangers of fluctuating local policy and exasperated local dissensions, the temptation of one village to make profit by the Puritanism of another adjoining it, the unfairness of shovelling out our drunkards upon our neighbour's ground, the alternative of either confiscating private property or else making a very burdensome addition to the rates: a primary and fatal objection to the scheme is that it is based on a wrong view of alcoholic drinks, imagining them to differ only in the degrees of harmfulness, refusing to admit any to be beneficial, and thus perniciously confounding our true friends the genuine light drinks with the adulterated and spirituous liquors which are our deadliest enemies. (*Cf. sup.*, § 176 *ad G.*) •

§ 180. Direct legal and police measures against intemperance such as those which I have suggested ought, if they are to bear proper fruit and not occasion fresh evils, to be accompanied by a number of indirect measures, which naturally will vary with the special circumstances of each country. In our own the most obvious of such

* On Mr. Chamberlain's scheme see the Lords' Report *Parliam. Papers*, 1878-79, x. pp. 513-515. They recommend that facilities be granted for the adoption of it or of the Gothenburg plan or of some modification of them. To the introduction of the Gothenburg scheme *pur et simple* the pecuniary difficulty seems to me an insuperable objection. In Sweden, with scarce any exceptions, there were no vested interests to deal with.

measures, besides an abundant and good water supply, is to provide pleasant and cheap non-intoxicating drinks in places as easy of access and as attractive as those where intoxicating, above all where spirituous drinks are sold; and the law should give every facility for the spread under the guidance of private benevolence or speculation of 'cocoa-houses,' 'coffee-taverns,' 'coffee-palaces,' or the like, such as have of late years been opened in several towns, and of coffee carts now often seen at the entrance of factories and dockyards.* For the allurements of spirits cannot always or fully be counteracted by beer, and in very cold or damp weather hot aromatic drinks are an invaluable ally, and in very hot weather refreshing drinks, iced or effervescent.

Further indirect measures, of great importance in England for temperance, have to do with the lamentable deficiencies in the dwelling places of many and in the amusements of most of our people, stricken by the double oppression of the speculator and the Puritan. In the following chapters we shall have to examine how they may be provided with healthful recreation and proper houses. Another source of drunkenness is the want of proper or sufficient food, especially among rural labourers and among certain classes of female workers in towns (as laundresses and seamstresses). Overwork and want of work, especially the disastrous alternations of the two, the mobility of the lower ranks of the working classes who escape parental control and public opinion (cf. Bridgett, *Discipline of Drink*, pp. 227, 228), the neglect on the part of the rich of the duty of Christian patronage (*sup.* § 150), and the want of religious influences, are all to be reckoned among the causes of intemperance. But mere elementary instruction—reading, writing and reckoning—as distinct from moral training, seems of little effect as an antidote, witness in the present century the well-schooled but intemperate Swedes and Scotch, North Ger-

* See the Lords' Report, *Parliam. Papers*, 1878-79; x. p. 530, and also pp. 558, 559, when an account is given of the cocoa-houses of Liverpool of which the first was opened in 1875, the thirty-first in 1878, and yielding a good profit to the shareholders besides the benefit to the working classes.

mans, and North Americans ;* and if the schooling of the masses, instead of being a mere supplement to, is made a substitute for their economical protection and religious training, it will foster rather than hinder drunkenness.

And now in conclusion let us be on our guard against extravagant anticipations ; nor hope too much from temperance, or expect that if drunkenness were extirpated our country would be turned into an earthly paradise : we should first have to extirpate human nature. For to be temperate is not the only or the first commandment, and there are worse evils than drunkenness, as opium and hashish eating, and many lower depths of sensual indulgence. The comparative sobriety of Mahometans does not keep them from moral abominations ; the crafty and avaricious peasant of Normandy who limits by immorality the number of his children, and the Parisian workman who respects neither God nor man, though ten times more sober than the Russian peasant, are ten times worse citizens and worse men. It is of no use to be sober unless we use our sobriety for a good purpose ; nor should we forget that a Nihilist is least mischievous when he is drunk.

But God forbid that I should damp the ardour of combatants in a good cause, or say that we must give up enthusiasm because we give up extravagance. It is possible to pursue even modest aims with zeal and perseverance ; and it is indeed worth while, when we see our country burdened by the yoke of an almost compulsory intemperance, to do a little, be it ever so little, to lighten this dreadful servitude.

† Cf. Whittaker in the *Dublin Review*, July 1879, pp. 20-25 ; Francis Peek in the *Contemporary Review*, Dec. 1876, p. 47. We may notice something of a contradiction between the doctrines of two sets of visionaries, the School Board fanatics and the Anti-Liquor Traffic fanatics.

CHAPTER VIII.

DWELLING HOUSES.

Variety of Dwellings and of the Amount Spent on Them, § 181, 182—Influence of the Dwelling Place on Health, § 183—Question of the Removal of Sewage, § 183*a*—Influence of the Dwelling Place on Morality, § 184—Fit Characteristics of a Dwelling House, § 185—Examples of Good Houses and Bad, § 186—Deficiencies in England, § 187, 188—Temporary Change of Residence (*villeggiatura*) and Living Away from Place of Business, § 189—Deficiencies in the Dwellings of the Common People (*Wohnungsnoth*), § 190–192—Causes of the Evil, § 193—Measures that have been Used Against it, § 194, 195—Possible and Fit Measures, § 196–199.

§ 181. The habitations of man are a subject matter on which the artist and the architect, the physician and the sanitary engineer, the historian and the antiquary have each their word to say ; nor must the economist neglect the teaching of any of them; and if in the following and fragmentary contribution they find matter for censure, it is due to ignorance or inadvertence, not to any disdain of their authority.

The variety in man's habitations according to time and place is very striking and can be studied in books of travel and antiquities.* Here let us consider not so much the fact

* A comprehensive history of man's habitations from the earliest ages to our own day would be a work, if well done, of extreme interest and value. But in whom are we to find the combination of the many accomplishments necessary for such a task? The little work of Viollet le duc styled *Histoire de l'habitation humaine*, and translated by Mr. Bucknall under the title of *The Habitations of Man in all Ages*, London, 1876, contains much that is interesting, but is ludicrously inadequate to its title, is incomplete, without references, and in the tiresome form of a novelette ; nor do I know, if we wish to get a general view of how the human race has been lodged, that we can do anything but laboriously search in learned monographs, dictionaries of antiquities, histories of architecture, reports of travellers, of consuls, of commissioners, and have at the end to make, as best we may, our own comparisons and

of this variety as its causes, of which seven can be conveniently distinguished. The first is the knowledge of the art of building among a people and their skilfulness in it. If their only tools are flint hatchets and flint saws they cannot construct a house of hewn stone; they can but pile up rough stones if these are at hand. The knowledge of how to make bricks and mortar, concrete and cement, may be absent or deficient. The discovery of the arch first enabled large spaces to be roofed over without the use of timber; modern skill in iron-working enables the same to be done without either arch or wooden beam.

Secondly, buildings are dependent on the building materials at hand. The bamboo was at one time almost the entire material of the admirable domestic architecture of the Chinese (Viollet le duc, *Habitations of Man*, ch. iv.). Utterly different in appearance, but very suitable for their purpose were the habitations of reeds and clay constructed by the ancient Egyptians (*Ibid.* chaps. ix. and x.). The abundance of good stone in Greece was essential to Greek architecture. Timber houses were long prevalent in central and northern Europe, and still delight the traveller in Switzerland. Part of the difference of the aspect of Paris and London is due to the one being near to deposits of excellent white limestone, the other in the midst of a great basin of brown clay.

Thirdly, the climate of a country ought to be and generally is depicted in its buildings. The great contrast is in the roof. In the dry regions of the East where great summer heat has to be mitigated the roofs from time immemorial have been flat and made of earth, forming a cool terrace in the evening, and protecting the rooms beneath from the noonday sun (Bryce, *Transcaucasia and Ararat*, pp. 187, 188). The other extreme is seen in the steep-pitched roofs to resist the tropical rains of S.E. Asia (F. McNair, *Perak and the Malays*, p. 160, *seq.*), or the snow of Northern Europe, compen-

draw for ourselves our own conclusions. As an instalment a re-written edition by some thorough mediaeval scholar of T. Hudson Turner's *Domestic Architecture in England*, continued by Mr. Parker, Oxford, 1851-59, would be a great boon to students. In the book as it stands, architecture is much better appreciated than manners and customs.

sating by their beauty for the loss of the house-top. Between these extremes come the gently sloping roofs of countries like those of Southern Europe, sometimes covered with tiles that are glazed to let the water run off quicker and to prevent the sun's rays penetrating (Viollet le duc, *l. c.*, p. 190). Again the warm and moist climate of the Philippine Islands is shewn in all the houses being raised six or eight feet above the ground on pillars of wood or stone, a practice beneficial to health and cleanliness (W. G. Palgrave in the *Cornhill Magazine*, Aug. 1878, p. 162, *seq.*) ; whereas in a dry climate it may be a protection against great heat or great cold to live in a house partly underground.

Fourthly, the houses may shew that motives of defence against enemies have influenced their construction. They may be grouped in compact villages though this may be due to other motives than desire for safety, and the villages, like those of the Etruscan Apennines, may be perched on heights away from the highways and inaccessible to carriages, each house solid and stone built. (E. M. Clerke in the *Cornhill Magazine*, June 1879, pp. 723-726.) The keeps of the Scottish border are to be seen repeated in similar circumstances in certain remote and mountainous parts of China, where the houses for the farmer with his farm-servants and cattle are within a fortified enclosure. (J. H. Gray, *China* 1878, II. pp. 112, 113.) Lake dwellings have been built by various races in different parts of the world ; dwellings, that is, constructed in the still waters of lakes far enough from the shore to give security. (Viollet le duc, *Habitations of Man*, pp. 384, 385.) Many shops in modern London can at a minute's notice cover their whole front with a surface of iron, a defence against rioters and thieves.

Fifthly, the house is often a mirror of the household. The grandeur of the hall and the comparative insignificance of the other rooms of a baronial castle are signs of the frequent festive gatherings, and community of life, and intimate union between masters and servants in the days when they were built. (Cf. Roscher, *Nationalökonomie*, § 226.) The careful separation of the servants' quarters from those occupied by their betters, an indispensable feature in any well arranged and genteel residence of to-day, shews the gulf between

classes, and an application of the sentiment : *odi profanum vulgus et arceo*.* Again, the seclusion of women appears in the arrangement of the rooms of an ancient Athenian house, with the women's part (the *Gynaecoonitis*) shut off from the men's part with but one door between them, and again in the modern Turkish house ; the habitual smallness of modern French families is presupposed by the small space allotted to children in each suite of apartments, in flats, and in each suburban or country villa ;† the vast 'hotels' of old France are monuments of the happy custom of married sons continuing to live with their parents.

A sixth cause of variety in habitation is variety in the conditions of ownership. The vast blocks of buildings in ancient Rome known as *insulae*, divided into numberless rooms and sets of rooms, and as a fact let out to tenants, would never have been built if each family had been the full owner or irremovable tenant of its own dwelling ; and we may say much the same of modern flats. How in England the appearance and solidity of houses have suffered from defective conditions of ownership, we shall see in detail presently. The cheap and flimsy cottages beginning to appear in the S.W. of France in contrast to the old and admirable ones (W. Webster in the *Fortnightly Review*,

* "It is the foremost of all maxims, that however small the establishment, the servants' department shall be separated from the main house, so that what passes on either side of the boundary shall be both invisible and inaudible on the other." (Kerr, *The Gentleman's House*, p. 67, cited by J. J. Stevenson, *House Architecture*, II. p. 78.)

† Thus in a recent French plan of a house to cost £6,000 the whole nursery accommodation is a small bedroom over the kitchen (Stevenson, *l. c.* I. p. 11).—There is indeed danger of rash conclusions, arguing for example, that the liking for a beautiful or again for a secluded house shews that family life is flourishing, and conversely. There is no necessary connection ; and in fact the family tie, notably filial piety, is very weak among the North American negroes who love to live dispersed setting up isolated houses on their farms (Sir G. Campbell, *White and Black*, London, 1879, pp. 133, 134, 351), compared with its strength among the Chinese, who love if possible to live collected in a village, and are willing to walk a mile or two every day to their fields rather than live in isolated houses (W. Gill, *River of Golden Sand*, London, 1880, II. p. 129). And the beauty of the houses of the Greeks and of the Romans in the days of their corruption was far greater than in the days of their simplicity.

Feb. 1881, p. 207), may be signs of the faulty provisions of the *Code Civil* concerning succession to property.

A seventh cause of unlikeness in dwellings, chiefly affecting their outward appearance, is the artistic culture of the builders or inhabitants. Ornamentation may be absent, scanty or abundant; bad, good or indifferent; suitable or not to the mode of construction. Thus the Romans keeping their own mode of building with arches and vaults perversely adopted for some four centuries the Greek mode of ornamentation; and this incongruous mixture has had a reign of some four centuries more in modern Europe. Again, compare the varied beauty of the old streets of Nuremburg, Verona and Cairo, each city with its own mode of decoration; and also the varieties of ugliness, the shewy vulgarity of Parisian boulevards, the mean villas of London stucco, the countless rows of brick houses that can scarce boast of any even vulgar ornamentation.

§ 182. The foregoing are causes that make a difference in the houses of different regions and periods; but in the same region at a given period the main cause of difference is the wealth or poverty of each family; and the contrast has often been witnessed of glittering palaces with squalid and crowded tenements close by, of a village of huts outside the grounds of a beautiful country seat. Indeed we may guess at the distribution of wealth from the relative character of the houses. Where all are much alike in their accommodation, we can presume that one man's income is not very different from another's; and sometimes we can make a sort of estimate of the numbers of each different class by looking at the numbers of different sorts of houses. The gigantic wealth of England is perhaps in no way so palpable as in the great number of streets and squares of those parts of London where we know the occupier of each house must have at least a thousand a year.

The amount spent by each family on its dwelling-place varies much, not only according to its wealth or poverty, but according to the circumstances aforementioned affecting variety of houses. Thus inventions like that of lifting weights by a crane or blasting rocks lessens the cost of building. The presence of cheap building materials may

give an immense advantage. In Ceylon, for example, instead of quarrying stone or baking brick, they dig the laterite clay (called *cabook*) in pieces about four times the size of a brick, and it hardens as it dries. (*Ceylon*, by an officer late of the Ceylon Rifles, London, 1876, I. pp. 48, 49.) The abundance of timber near the German towns in the Middle Ages enabled houses to be built quickly and cheaply. In the thirteenth and fourteenth century at Basel the average price of a house was less than that of a good war horse. (W. Arnold, *Zur Geschichte des Eigentums in den deutschen Städten*, 1861, p. 191.) But of course we must add to the cost of timber houses a higher charge for insurance against fire. Again, the open air life in a warm and dry climate obviously requires less expenditure on dwellings; and where peace and honesty reign undisturbed we can save ourselves the charge of fortifying our house against marauders, or bolting and barring it against thieves. Further, domestic habits may greatly influence expenditure. For example, where several generations live together under one roof the same accommodation can be given for much less cost than where each married son inhabits a separate house. The conditions of ownership also may make much difference. Thus if a family have permanent occupancy of their house they are likely to be willing to spend much more in improving and adorning it than if they are tenants who can be evicted; on the other hand such tenants, as we shall soon see, may, though unwilling, be compelled to spend much more on lodging than if they were owners, and get much less in return. Lastly, the greater or less desire for ornament may affect expenditure very much, though of course the expenditure is no measure of the beauty, as the best decoration may cost less than what is tasteless and offensive.

The richer classes having to assign so much smaller a proportion of their revenue to procuring food than the poor, might be supposed to assign a larger proportion of it to procuring habitation, to spend, that is, not merely absolutely but also relatively more on houses than the poor. This has often been so, but not always; and in the great cities of modern times the lower ranks of society, in particular the common labourers, often have to spend as much of their

income on a couple of miserable rooms as a merchant on an entire house, or a rich banker on a splendid mansion. The immediate reason is that they are more helpless in resisting extortion. The fact, though indubitable, deserves illustration. In Berlin according to Schwabe (cited by Schäffle, *Nationalökonomie*, 3rd ed. II. p. 548) house expenses absorb the following proportions :—

Of an income of	300 thalers	24'10	per cent.
" "	500	22'11	"
" "	1,000	27'56	"
" "	1,500	23'39	"
" "	2,000	20'56	"
" "	4,000	15'12	"
" "	10,000	9'20	"

In Whitechapel according to an account in *The Times*, 22nd June, 1881, the tenants in certain overcrowded districts "although herded like beasts, were compelled to pay enormous rents for the use of the dens and lairs in which they lived. 3s. 6d. for one 'room' no larger than a fair sized cupboard, and 5s. for two mere hutches were common charges. In many of these places there was no ventilation or light." In short the poor must often take what they can get and pay what they are asked without hope from resistance or complaint.* Such payments absorb often 20 per

* "Those who suffer most, such as the inhabitants of cellars and the worst class of tenements, are utterly helpless to remedy their condition even if they felt urged to do so. The cottage occupier, who is a grade above the lowest class, is almost equally powerless. The houses may be badly drained, or placed near noxious gases poured forth from some neighbouring chimney; or they may be built back to back and devoid of all decent conveniences; but the poor tenant is helpless. There are the houses, and he must live there or nowhere. As the rents of most of these smaller tenements are collected through agents, he has not even the privilege of complaining to his landlord; and the agent, with his own affairs to look after, and but a secondary interest in the property, has no ear for complaints." (James Hole, *Homes of the Working Classes*, 1866, pp. 22, 23.) In *The Times*, 28 April, 1880, Mr. Dickins notices that many of the poor pay for miserable hovels a far higher rent in proportion to what they get than their richer neighbours, and gives his experience of the town of Winchester: "The landlords, most of whom are small tradesmen, to whom cottage property is the regular investment, fix the rents not according to the supposed value of the houses or in reference to their outlay upon them, but upon the sole question of what

cent. of their revenue or more; whereas under different circumstances for altogether better lodging we have examples of only some 5 or 7 or 12 per cent. being paid. (See the tables of expenditure *supra* § 151, note.) And thus because one workman spends a much larger proportion of his earnings on housing his family than another, we cannot assume that he is either more anxious for their welfare or in fact provides them with a better lodging. In this matter as in so many others mere figures are often mere delusion.

§ 183. The need of a healthy dwelling place for a healthy life is evident; but what constitutes a healthy dwelling place is often obscure: the degrees of unhealthiness are many, the power of resistance to disease is varied, and the circumstances affecting health so complicated, so unequally present, so unequally affecting different classes of persons, that each special country or even district requires its own specially trained sanitary engineer. For modern England we may follow the guidance of Mr. James Hole (*The Homes of the Working Classes* 1866, pp. 9-16), and demand: first, that every house be provided with adequate conveniences in the shape of a privy, ashpit and drains, and means of frequent clearing or cleaning them; secondly, that all receive an adequate supply of water (see *supra* § 161); thirdly, that none be under the necessity of turning their dwelling rooms into a wash-house and drying-yard, an intolerable discomfort to the inmates and injurious in certain maladies by the damp atmosphere created; and thus we must demand back yards or gardens or public wash-houses and drying grounds; fourthly, that a minimum provision of air and light for each house and person be compulsory; and thus a minimum width of street varying with the height of the houses; a certain proportion of land to be left unbuilt on; certain kinds of building as the so-called back-to-back houses or blind alleys to be forbidden as making ventilation almost impossible, and no cellars to be used as dwellings; and, moreover, a certain cubic measure of air to be required for every inmate.

can be squeezed out of the tenant. The occupiers, with that timidity of assertion and inability to combine which is so characteristic of the poor, consider nothing but that if they demand repairs or resist extortion they will have to make way for some one else who will not."

This last requirement indeed is of less importance if there is fit ventilation ; as Mr. Hole says (*Ibid.* p. 11) " 250 cubic feet of space where fresh air can pass freely through a room is more valuable than 1,000 feet where it cannot." And Dr. Smith (*Foods* 3rd ed. pp. 473-476) justly protests against the costly exaggeration which demands for each occupant some 2,000 cubic feet of air-space, when a fourth of that space if the room be properly ventilated, is ample for the sake of health. Let us also remember that fresh air excites hunger which all have not the means to satisfy, and that for the underfed and thinly clad, warmth is a more pressing requirement than ventilation (*cf. Ibid.* p. 266) ; so that they rather fulfil than violate the dictates of sanitary science when they shut up every cranny and seem to delight in a stifling and fetid atmosphere. Perhaps instead of the endeavour to secure them the expensive combination of warmth and ventilation in their houses, the indirect method of warm clothing, like the wadded garments and thick soled shoes of the Chinese in the place of warm houses (Gill, *River of Golden Sand*, I. p. 183, 184), might change them into lovers of fresh air. But at any rate we may add as a fifth requirement of English sanitary legislation, that diy walls be secured by precautions which any good builder can take ; nor is there any need to tolerate " structures . . . cemented of untempered mortar or mud counterfeiting mortar, planted on a foundation of dirty rubbish, clammy with latent chilly moisture three-fourths of the year, and reeking like a steam oven during the remaining fourth " (leading article in *The Times* 2 Feb. 1881).

§ 183a. Something more must be said regarding the first of the foregoing requirements ; for the disposal of town refuse is a matter in which health, revenue, and comfort are much concerned ; and it is no easy matter to pay due regard to all three. The Chinese look to the first two, at any rate to the second, and seem to disregard the third* ; whereas in England revenue is commonly sacrificed in our efforts after health and comfort, and we have been charged by Liebig with annually wasting through our senseless system of water-closets the means of reproducing food for $3\frac{1}{2}$

* See the account in J. H. Gray, *China*. London, 1878, vol. II. pp. 123, 124, 132. An illustration of the maxim : *bonus odor lucri*.

million persons (Roscher, *Ackerbau* § 41a note 3), probably no exaggeration (*sup.* § 82). If indeed, as might be around a small town in a thinly-peopled land with rough and rude agriculture, the soil needed no artificial enrichment, the 'water system' of drainage, washing all away, might perhaps for that town be the cheapest; for there must be sewers in any case to remove the house and kitchen slops, the surface rainfall, and perhaps also the liquid refuse from factories. But this is not the case round the large towns of England and the Continent where agriculture is most intense (market gardening) and manure most needed; and as we have seen (*sup.* § 82) the remoter rural districts, as their produce is now drained into the great towns, are beginning to need the drainage of those towns as a return. It must be taken then as settled that sewage must be utilized; the only question is how. Our manners forbid the Chinese method, where the night soil is carefully collected, packed, sold, transported, and stored by private zeal animated by the belief in its value. For small towns the 'dry system,' if of a good kind, seems best, avoiding the complications of sewage drains and the expense of chemical processes; and is applicable even in large towns like those of Holland, where there are great facilities for removal by water. Amsterdam sends its sewage in barges to the country, and Groningen has been making by the weekly public sale of its sewage for years past over £1,000 a year, so that instead of its sewage-removal being a cost it brings in over 6d. a head every year. The plan of sewage farms, that is, using the water-carried sewage to irrigate certain lands, fertilizing them, and itself absorbed and oxidized, is a plan applicable in exceptional cases. A part of the sewage of Milan ever since the 14th century has been turned with the aid of a small river on certain lands in rotation for periods of six or seven years. But in general it can be said there is immense loss of fertilizing power through the excess of water, and above all through the concentration of so much manure on a single spot, besides serious risks to the health of neighbouring districts. That so many sewage farms in England have been a financial failure is indeed no argument against them; for the loss has been due to ignorance and mismanagement. But those other objections are

decisive against them. And the chemical treatment of sewage has in several cases been unremunerative because, before the matter was subjected to treatment, it had already lost, by soaking into the earth or evaporating, a large portion of its force. What then is to be done? I will give from a recent authority what we should aim at, without attempting to decide the question whether the removal of the sewage should be done by the force of water, or of air through pneumatic channels (as at Leyden), or by a trained band of scavengers, or in any other way. "All human excrement must be preserved from evaporation and leakage, which are unhealthy and make it worthless, and must be conveyed to a suitable spot near the town. There too must be brought all other refuse of the town, all bones, soot, ashes, blood of slaughtered animals, bad meat, coffee-grounds, &c. The whole must then in government works be converted by known and simple chemical processes into a solid, easily pulverized mass, the so-called *poudrette*. The water set free by the process might, it is possible, be applied for irrigation" (*Oesterreichische Monatschrift für Gesellschafts-Wissenschaft*, Juni 1882, p. 302). Whether the use of this *poudrette* should be made obligatory, as the writer suggests, may be doubtful; the need of its use seems certain, and that in this way the disturbed balance of nature would be redressed, and the desperate practice of importing guano and nitrate of soda be made an end of.*

§ 184. The influence of dwelling place upon morality may be as great as upon health, and the condition of a house be not merely a token but a powerful cause of moral depravity among its inhabitants. Discomfort within may drive to dissipation without, and want of privacy may lead to want of modesty; but the main evil probably comes from the infection of bad example; *cum perverso perverteris*; and the forced companionship with thieves and drunkards, prostitutes and blasphemers, is certain in the great majority of cases

* I have got information from Roscher, *Ackerbau*, ed. 1873, § 42, note 9; James Hole, *The Homes of the Working Classes*, London, 1866, Appendix B; the report in *The Times*, 6 Oct. 1876, of the Congress at Brussels; the account in *The Times*, 2 Jan. 1877, of the report of the Commissioners on sewage, whose conclusions, I may add, appear far from sound.

to lead into some sort of vice or crime.* We must therefore be careful to make the necessary distinctions, and not confuse crowding with contamination. The dwellings of many rude or down-trodden peoples may fall short of an ideal standard, but may yet be compatible with happiness and morality, when the same dwellings among other peoples, in other conditions of life, with different training and self-

* For the connection of misconduct and bad dwellings statistics are sometimes forthcoming. Thus Dr. Etienne Laspeyres was able to sustain by figures the following propositions concerning the lower classes in Paris (*Der Einfluss der Wohnung auf die Sittlichkeit*, Berlin, 1869, § 4, 5, 16): The more *good* furnished lodgings in an arrondissement, the fewer in it are the workmen of very bad behaviour, and the more are those of good behaviour.

The more *very bad* furnished lodgings in an arrondissement, the more in it are the workmen of very bad behaviour, and the fewer are those of good behaviour.

The more *good* and *tolerable* furnished lodgings in an arrondissement, the more in it are the workmen of good and of tolerable behaviour, and fewer those of bad or very bad behaviour.

The more workmen of a trade live in furnished lodgings, the more are the workmen of this trade who behave badly; and the same in a higher degree for workwomen.

The more workmen of a trade live with the master, the fewer are the workmen of this trade who behave badly; and the same in a less degree for workwomen (the less degree due to the fact that of those living with the master the males are on an average younger than the females, and thus more under control).

The more workmen of a trade live with furniture of their own, the more are the workmen of this trade who behave well; and the same in a higher degree for workwomen.

And Laspeyres maintains also (*Ibid.* § 17) that the influence of habitation on behaviour is much greater than the influence of behaviour on habitation; that there is often no freedom in the choice of where to dwell, and that the fact of different sections of the labouring population being some better off materially than others has little influence on the goodness of their respective habitations. So far Laspeyres. Mr. Hole (*The Homes of the Working Classes*, pp. 16, 17 and 21) emphasizes the connection of prostitution, illegitimacy, and infanticide with the horrible dwellings of our large towns; and also notices how the frequency of illegitimacy in rural Scotland has much to do with the crowding male and female labourers into the same hut—a part of the bothy system. It is indeed often very difficult to say whether immorality has been *caused* by overcrowding; but where immorality prevails, it is usually plain enough that we can do little against it unless overcrowding be first removed.

control, with different delicacy of nervous system and capacity of endurance, with different habits of work and manner of clothing, with different views on the necessity and fitness of privacy: would be unendurable or only endured at the cost of self-respect and modesty. It may be that the Britons before the Roman conquest used to sleep a number together in circular stone-built huts a little over twelve feet in diameter within, and lay with their heads to the wall, their feet at a fire in the centre.* They may have lived happy and upright lives all the same. The tents of pastoral people have not been so deficient an habitation as to prevent them fulfilling the purpose of human life. *Omnia munda mundis*. The bad cottages of the English peasantry it can be scarce doubted are a frequent source of immorality†; but the Irish peasants far worse lodged—some 200,000 families are said to live each in a mud cabin of a single room—are an example of morality to all Europe.‡ Much then as it is to be wished that all should have the possession and the capacity to use a dwelling place adapted to a refined life, we must well distinguish the comparative unimportance of this from the crying need of reform amid many, principally town populations, where by a dreadful combination of circumstances thousands who need a decent dwelling, if they are to live decently, cannot get one; and having to forego what for them is well nigh a necessity of moral life are almost compelled into a life of degradation. But before looking to

* See J. J. Stevenson, *House Architecture*, 1880, II. pp. 2, 3. Whether there is any proof of these compressed habitations being used except in time of war is another matter.

† See *infra* § 192. In the last century the difficulty of getting a cottage or a decent cottage acted as a serious check to early marriages among the rural population of England; whereas at present the difficulty of young men getting lodgings, except at the public-house, is said to drive respectable young men into premature marriage, to avoid the wretched discomfort of the public-house.

‡ Cf. also what is said of the rural population in Northern Scandinavia: "In most farm houses all the family sleep in one room where even guests are accommodated. Indeed it seems to be considered inhospitable to allow a guest to sleep in a room by himself." Only also "it seems customary for both men and women to sleep with most of their clothes on." Review of du Chaillu's *Land of the Midnight Sun* in *The Times*, 12 Oct. 1881.

this terrible disease of modern society, its causes and remedies, let us first look at lighter evils, many of which affect even the wealthy, and let us seek for a standard of excellence which we should endeavour to attain.

§ 185. Anticipating for a moment what is to occupy us in the next book, let us say that as in the family spirit there can be and has been both excess and defect, so also in the view of the family dwelling: excess, when, forgetting that we are but strangers and pilgrims in this world we regard our place of sojourn as our eternal abode, and transform our reverence for the domestic hearth and for parental tombs into superstitious awe, and transfer to dead ancestors and to imaginary local and domestic deities some of that sort of worship (*latria*) due only to Almighty God: defect, when, forgetting that man is more than a mere animal, and that the family is a sacred association in the sense of being specially appointed by God and having a number of most solemn duties attached to it, forgetting moreover that man has a sensitive as well as a rational nature, and is swayed by external influences, memories, associations, images, and living in time and space is controlled by seasons and places, we regard a house as a mere arrangement of building materials in a given longitude and latitude, and think that provided the rain and wind be equally well excluded, home life is likely to be as happy, family discipline as well cared for, family union as close, in a hired tenement as in an ancestral home.

Between these two extremes the golden mean has seldom perhaps been reached except in Christian countries, as Christianity, which has waged a ruthless war against ancestor-worship and domestic deities, has nevertheless known how to bind by sweet and holy ties the dead members of a family to the living, and the living members to each other.

The ideal to be sought is to set each family in the secure possession of a separate dwelling. A family, let us remember, does not mean only father, mother and young children, but may include a wide circle of kindred, as in the South-Slavonic house family, and ought at least to include three generations (grandparents and grandchildren), as among the stem-families of many parts of Europe. The requirement

of a separate dwelling is not only incompatible with the melancholy custom of several families being lodged in the different rooms of a single house, but also with the custom of dividing a house into floors or flats more or less shut off or separated, and lodging a family in each. A certain number of houses thus arranged may be useful for temporary residents in towns, and for persons in abnormal conditions of life ; a large number of them may for the poorer classes in a diseased society be the best way of escaping worse evils ; but their common use among the rich and the middle classes is both a sign and a cause of moral disorder.* By secure possession I do not mean that particular form of legal ownership (like freehold tenure in England) which in each country gives the holder of that right the greatest power of dealing with the property. The point is that a man may improve and adorn for his children's children without fear of the stranger entering in ; and for this a perpetual lessee may be as well off as the English freeholder, and better off if the

* Le Play, *La Réforme Sociale*, 5th Ed. 1874, ch. XXV., § 6 and 13, denounces the modern Parisian custom of grouping together many families in palatial dwellings, often not even a separate family on each floor, and the domestics always relegated to the top floor, where there is no fit separation of the sexes, and where they form a common alliance to disobey and deceive their masters. The landlord lives away and delegates his authority (needed to arrange the common use of stairs, courtyards, etc.) to an agent, the porter (*conciërge*), who may be extortionate or untrustworthy. A fine price to pay for those imposing façades, the delight of gaping tourists, the despair of artists and antiquaries who mourn the gabled monuments swept away ! Naturally all the evils of actual Parisian flats are not essential to the system, and may not be so conspicuous in German large towns, where according to Dr. Engel (*Die moderne Wohnungsnoth*, Leipzig 1873, pp. 13, 14, 60) flats are the prevailing custom. Thus at Berlin the average number of persons in each house is about fifty-six, in Vienna fifty-seven. But the difficulties and miseries attending the plurality of families in a house and the superimposition of one upon another, can be well seen from the elaborate provisions in Berlin house leases for keeping order among the co-lessees or lodgers, regulating for example the cleaning by turns of the stairs, passages and their windows, the use of the washhouse and yard, the bringing in of fuel, and the cutting up wood ; bidding doors be shut ; forbidding window boxes, the playing of children on the stairs, music, wooden slippers, and so forth. (See § 9 of the contract given *Ibid.* Appendix III.)

law exempts the home from seizure for debt and if there be many hindrances to its alienation, such as consent required from wife and children, or the right for many years after of recalling the sale. Indeed the power of the existing head of the family to sell or mortgage the home has been a rock on which many attempts of modern philanthropists to make workpeople live in homes of their own have been shipwrecked.* And such laws as those of the French on succession, involving a compulsory partition of the property, and frequently the sale of the ancestral dwelling-place, perversely render every home insecure.

But a gross age needs gross arguments ; and those who reject as sentimental all higher appeals must be moved by an appeal to their pockets. The English, the French, and the Germans have a very true saying to the effect that three moves are as bad as a fire.† But though they say it they disregard it ; and the streets are filled with vehicles conveying the goods of families removing, from the trucks and carts that serve for the poor, to the gigantic waggons for the rich, as large as a cottage and often adorned with paintings of the various processes of removal. It may be a grand thing thus to revert to the habits of the Scythian nomads ; but it is costly. Carts and horses, packing and unpacking, lading and unlading, entail heavy expense, besides the inevitable damage to much of the furniture moved. And there are many indirect expenses through the inducement to build bad houses, make bad furniture, use house and furniture

* "A long study of the domestic life of European workmen," says Le Play (*L'Organisation du travail*, 3rd ed. 1871 § 24, note 2), "has shown me that, barring certain exceptional regions, only a small minority can resist the desire, if they possess a house or land, of mortgaging it to procure some immediate enjoyment." And after noticing how this weakness of the majority was well provided against in feudal times, he continues : "This same weakness causes a difficulty to those who, in Alsace in particular, nobly devote themselves to restoring among the workpeople the practice of owning their homes. A recent inquiry has led me to state that several employers, after having helped their workpeople to acquire a home, had seen the need of themselves retaining the right of forbidding it to be mortgaged ; thus reverting, in the very interest of the workpeople, to the practice of the fief."

† In German : Dreimal ausziehen ist so schlimm wie einmal abgebrannt. In French : trois déménagements valent un incendie.

recklessly and wastefully. (Cf. Engel, *Die moderne Wohnungsnoth*, 1873, pp. 7, 8, 11, 12.) We smile at the folly of the Persians among whom it is or was the custom for the son when his parents were dead to leave their house to fall into decay and to build himself a new one, so that most of the towns were half full of ruins. (Roscher, *Nationalökonomie* § 208.)* But our custom of frequent moving is perhaps as costly without even a superstition to excuse it.

§ 186. Many who reject the Christian view of the family and of human life may dislike the ends and means commended in the foregoing section, but cannot, unless unacquainted with history, pronounce them untried or impossible. Le Play tells us how the tranquillity he found in the East of Europe even in the poorest families through the permanent possession of the domestic hearth first opened his eyes to the untruth of certain Western doctrines on society; and among the six customs essential to well being he gives as one, the indissoluble union between the family and its hearth (*L'Organisation du travail*, § 24). In the middle of this century he found this custom almost universal in the North, the East, and the South of Europe, and still much spread in the Centre and the West (*Ibid.*). It was one of the features of the Christian Middle Ages. Our so-called serfs under the Plantagenets were secure in the possession of their homes. In the towns of mediæval Germany the legal ownership of the houses and the ground passed through a series of interesting changes, subdivisions, and consolidations: the secure and separate possession of the house by each family remained the general rule throughout.† At Toulon before the French Revolution most families still possessed the dwellings which their ancestors built in the Middle Ages. Now indeed the operatives generally live in hired tenements. (Le Play, *l. c.*) All over the Balearic Islands, the English consul tells us (C. T. Bidwell, *The*

* In Tunis the Beys have a superstition against living in a palace where one of their predecessors has died; so each Bey builds himself a new dwelling, in its turn, if he die there, deserted with all its out-buildings, which in an oriental establishment are so numerous. (Lady Herbert, *Algeria in 1871*, p. 254.)

† See the treatise of Wilhelm Arnold, *Zur Geschichte des Eigentums in den deutschen Stäten*. Basel, 1861.

Balearic Islands, 1876, p. 56), are to be found cottages dotted about, many of them built by the handiwork of the occupant, in which the family of the labourer make their home and live on from generation to generation, each cottage with a plot of ground attached to it sufficient for the growth of the necessary vegetables. In Switzerland it is said to be difficult to find a family residing in a house that is not its own (*Contemp. Rev.*, Aug. 1880, p. 190). But we need not multiply examples; and reason and experience tell us that the many contrary examples are not from the nature of things, but man's handiwork that may be or might have been undone. It was not necessary that many of the residents in ancient Athens should have been legally disqualified from owning houses and compelled to live in lodgings. It was not necessary that much of ancient Rome should have been built in great blocks (*insulae*) generally in the hands of a house-proprietor (*superficiarius*) with a ground-landlord (*dominus*) above him and a number of tenants (*inquilini*) below him (W. Arnold, *Geschichte des Eigentums*, p. 197-199); nor that the tenants and lodgers should have had to endure the dear and comfortless, badly built and dangerous dwellings which Juvenal has described for us (*Sat.* III., 190 *seq.*) so amusingly. Again, it is not necessary that the bulk of the inhabitants of Paris, Berlin, and Vienna should dwell in lodging houses. They are indeed obliged, but the obligation is of human imposition. For two miles round Berlin all the land had passed, by the year 1873, into the hands of speculators in building land long before there was any thought of building on it; thousands of acres kept passing from hand to hand; sometimes vast fortunes were made by the speculators and speculative companies; and the immense price to which land rose was a hindrance to building, an occasion of exorbitant ground rents and house rents. (Engel, *Die moderne Wohnungsnoth*, pp. 15-17). This gambling and usury—this *Baustellen-Jobberei* and *Baustellen-Wucher* in the language of its victims—rest on certain human laws which assuredly can be altered. Nor again is there any necessity for the conditions of house-ownership in our own country, to which I now turn.*

* The need of looking beyond our own country and time is seen by

§ 187. Throughout England and notably in London and among the middle and even the upper classes, not only the lower, the occupier seldom owns his house. In the country districts this is part of the agrarian system, with the farmers mere tenants at will or for years, and mere hired labourers under them. In regard to London and the suburbs their condition is vividly described in an article on the state of English Architecture in the *Quarterly Review* of April 1872 (Vol. 132). Not one house in a hundred is absolutely freehold ; most of the land is let by the owners on a ninety-nine years' lease, after which all the buildings on the surface absolutely revert to the owner of the soil. This system already much developed in the last century has recently grown apace. Moreover, now "the average term of the leases . . . is so reduced by lapse of time and by short renewals that the houses in London will, on an average, be all lost to their present owners within forty years." (*Quarterly Review*, l. c. p. 325.) And the number of persons and rights that may be connected with a house are startling. "First, there is the freeholder, who has a ground rent ; then, secondly, a leaseholder, with an improved ground rent ; and third, the nominal proprietor with the rack-rent ; fourth, the first mortgagee ; and probably, fifth, the second mortgagee ; and sixth, the tenant, or leaseholder, with, perhaps, a sub-tenant, yearly, and probably some lodgers by the week or month. Besides these 'interests' there are the lawyers, with their bills of costs, collecting agents, repairing builders, water rates, and insurance charges. This, or something like this, may be taken as the probable condition of three-quarters of the house property of London. (*Ibid.* p. 327.) Hence it is difficult for any but the very rich, and almost impossible for the great bulk of the poorer classes to become owners of their houses. Moreover, "this leasehold tenure with its gambling speculation, extensive and often fraudulent

the example of Mr. F. B. Zincke, whose article styled "A Dishomed Nation" in the *Contemp. Rev.*, Aug. 1880, while containing much that is to the purpose, misleads greatly by the implication that outside the British Islands all is and has been well in regard to the ownership of the home, and by making our system of land-tenure and building leases much more guilty than it really is, forgetting the various other causes of the evils he deplores.

building agreements—its heavy law costs, complicated mortgages, releases, re-mortgages, and second charges—its doubtful titles and dreary waste of title-deeds—the risk of forfeiture, and the shortening term—forbids prudent men of business to erect substantial, well-built houses.* Small plots of freehold land, except on the estates of building societies, are seldom in the market, and these estates almost invariably become traps for the inexperienced, and opportunities for the scamp; and, while this system lasts, they will, by the mere force of custom, fall very much into the hands of speculative builders." (*Ibid.* p. 326.) With such laws and customs it is but natural that a race of ignorant or careless or extortionate or dishonest petty builders should be generated. "Houses for the working classes and for the lower sections of the middle classes," says a noteworthy article in *The Times*, 2nd February, 1881, "are erected commonly so that they can never be homes. They are saved from becoming sources of disease and death only by the dubious remedy of official vigilance. Builders are in the habit of trying to shift some of the evils which befall their customers upon parochial neglect. As they are always powerful in vestries, that is

* Dr. Simon, in the Seventh Report on Public Health, after referring to the extreme badness of the coal-miners' dwellings, ill-arranged, packed together, over-crowded, noticed the apology alleged, "that mines are commonly worked on lease; that the duration of the lessee's interest . . . in collieries commonly . . . twenty-one years, is not so long that he should deem it worth his while to create good accommodation for his labourers, and for the trades-people and others whom the work attracts; that, even if he were disposed to proceed liberally in the matter, this disposition would commonly be defeated by his landlord's tendency to fix on him, as ground-rent, an exorbitant additional charge for the privilege of having on the surface of the ground the decent and comfortable village which the labourers of the subterranean property ought to inhabit; and that this prohibitory price (if not actual prohibition) equally excludes others who might desire to build." (*Parliamentary Papers*, 1865, Vol. xxvi. p. 16). And Dr. Hunter reported (*Ibid.* p. 180, 181) on the brisk demand for and petty speculation in cottages near the pit's mouth. "An owner who is letting broad lands to farmers at £2 or £3 an acre demands 3s. a yard from those who propose to lay it out for building, and they in their turn demand 6s. from smaller capitalists who can only afford to build half a dozen cots, and who take care of themselves on the same principle in dealing with the tenant labourer." And he proceeds to describe these horrid settlements. (*Ibid.* p. 181 *seq.* Cf. 515-517, 231 *sq.*)

simply to transfer the burden from the one to the other shoulder. . . . The necessities . . . wanting to the wretched abodes which spring up like mushrooms about every great English town are, for the most part, absent, less through the demands of economy than from positive ignorance in the builder of his art, and from failure of common care to see that his subordinates keep faith in their work. The enormous difficulties which anybody who, without the hardihood to be his own builder and architect, is willing and able to give the price of a beautiful and wholesome house, finds in attaining his object, are proof that not so much the exigencies of cheap lodging as the indifference and incapacity of the business which supplies it are accountable for the crying evils of modern English house architecture." On the need of every builder and builder's foreman having a diploma, and on the enfranchisement of leasehold houses, I will speak presently in connection with other legal reforms. Here rather let us notice how striking is the phenomenon that during much of this century in most of our houses in the greater part of England, the elementary sanitary requirements have often been lacking through the ignorance or helplessness of the occupants and the ignorance or cupidity of the builders ;* while comfortable houses have seldom been built, beautiful ones scarce ever.

§ 188. Lovers of the beautiful have indeed occasion to

* Mr. James Hole, *The Homes of the Working Classes*, 1866, pp. 8, 9, says in regard to cottage dwellings : "Social or sanitary considerations do not sufficiently weigh with the capitalist builder if they involve an increased outlay without a corresponding return. The smaller the house the larger is his percentage of profit. Hence the space for living is contracted to the smallest limits, and the larger number of cottage houses consist of a living room, one bedchamber, and a closet called a bedroom. The small capitalist who owns, it may be, a score of these cottage tenements, is often as ignorant as the tenant himself of the vital necessity of light and pure air. If by any ingenuity he can cram a cottage or two more on the land, and thus increase his percentage, he will be only too glad to do it ; and if there are no municipal regulations enforced, he will do it. If by a little contrivance he can let off the cellar as a separate dwelling, he largely increases his profits. He has no difficulty in finding tenants for the worst places. There are always some so poor that the most wretched den seems to them better than to be homeless."

mourn. "Though we may not be conscious of it," says one of them, "it is no slight evil that the houses in which the greatest portion of the people live are built independently of art at all, or in defiance of it. Within the last twenty or thirty years whole towns have come into existence, which exhibit what seems a new characteristic in the human race—namely, utter disregard to the beauty of their dwellings. Never, so far as I know, have there been collections of human habitations so dismal, so completely without one artistic quality, or consequently so inhuman, as the miles on miles of uniform streets in our new manufacturing towns. The hut of the savage is at least picturesque; for love for the beautiful—a desire to ornament and turn into objects of art the things they use—has hitherto been a characteristic of all men, even the most degraded." (J. J. Stevenson, *House Architecture*, 1880, I. p. 23.)* The rich indeed, just as they can compensate by elaborate devices in the fittings of their house for the deficiencies in its construction, while the poor have to bear its unmitigated discomfort, so too can compensate for the external ugliness by making the interior a store-house of beauty. But hereby is lost one of the ways in which the rich can turn their riches to the general good. Mr. Ruskin, while exhorting the citizens of Edinburgh in 1853 to put sculpture on the outside of their houses, said to them truly and well: "Your separate possessions of pictures and prints are to you as if you sang pieces of music with your single voices in your own houses. But your architecture would be as if you all sang together in one mighty choir. In the separate picture, it is rare that there exists any very high source of sublime emotion; but the great concerted music of the streets of the city, when turret rises over turret, and casement frowns beyond casement, and tower succeeds to tower along the farthest ridges of the inhabited hills,—this is a sublimity of which you can at present form no conception; and capable, I believe, of ex-

* The fact of nine-tenths of our people being in æsthetic darkness and degradation far below the lowest savages, is noticed by G. A. in an article on "Cimabue and Coal Scuttles," in the *Cornhill Magazine*, July 1880, pp. 62-66. But it is one thing to recognize a fact, another to explain it.

citing almost the deepest emotion that art can ever strike from the bosoms of men." (*Lectures on Architecture and Painting*, 2nd. ed. 1855, p. 92.) Let us hear also what he said as follows (*ibid.* pp. 93, 94): "I believe that the wandering habits which have now become almost necessary to our existence, lie more at the root of our bad architecture than any other character of modern times. We always look upon our houses as mere temporary lodgings. We are always hoping to get larger and finer ones, or are forced, in some way or other, to live where we do not choose, and in continual expectation of changing our place of abode. In the present state of society, this is in a great measure unavoidable ; but let us remember it is an *evil* : and that so far as it *is* avoidable, it becomes our duty to check the impulse . . . it surely is a subject for serious thought, whether it might not be better for many of us, if, on attaining a certain position in life, we determined, with God's permission, to choose a home in which to live and die. . . . Consider . . . also, whether we ought not to be more in the habit of seeking honour from our descendants than our ancestors ; thinking it better to be nobly remembered than nobly born ; and striving so to live, that our sons, and our son's sons, for ages to come, might still lead their children reverently to the doors out of which we had been carried to the grave, saying, 'Look : This was his house : This was his chamber.'"

§ 189. The frequent change of residence and ownership we have mourned over must not in any way be confused with two other customs, though it sometimes may foster them. One is to spend some weeks of the year in some other house away from home ; and this custom may assume various shapes. The rich who own and occupy several houses may pass from one to another, so that it is difficult to say where is the family seat. But it is more likely that while the others are accessories, one can be indicated as the principal, such as the country seat among the English, the city palace among the Italians. Sometimes all town residents who can afford it pass some of the fine season of the year in the country ; a commendable habit. So at Palma in Majorca, the landed proprietors always reserve for themselves the upper part of the house on the farm in which the farmer lives ; and go there

for the summer months ; while those without land buy villas near the sea or in villages near the town (C. T. Bidwell, *Balearic Islands*, p. 155). In Italy it is an established custom for the richer townfolk to spend a portion of the year in *villeggiatura* on the sea coast or among the hills,* sometimes also in a suite of apartments they have reserved for them in the farm house of their tenant.

In England manners forbid the joint occupation of the farm house by the owner and the farmer ; but then, whereas the Majorcans will not let their unoccupied houses either in town or country, and all houses there built for letting are unfurnished flats (Bidwell, *l. c.* pp. 147, 148, 155), in England even the rich are found willing without scruple to let furnished their habitual residences. How wide-spread among us is the habit of *villeggiatura* can be seen from the numerous towns stretching sometimes for miles along our coasts and mainly composed of furnished lodging houses.

The second custom is that of the middle and upper classes living at some distance from their place of business, a custom which has become almost universal in the large towns of Great Britain, especially since the use of coal and steam has made the town more repulsive and the suburbs more accessible ; and thus for miles round, the country is dotted with houses whose occupants six days in the week make a journey to the town. The physical advantages of living in the pure air of the country or at least in a better quarter of the town are obvious ; and though the gain to a man's health may be much reduced by the noise and excitement of a daily journey, this at least is escaped by his wife and children. But we hear complaints of this migration of the better educated and better conditioned as an injury to the poor left behind, aggravating the isolation of different classes and the antagonism of employer and employed, making the social agencies that might bring classes together almost impossible through distance, putting an end to those common interests and that sympathy that comes from neighbourhood, that keen appreciation of evils that lie at our door (J. Hole, *Homes of the*

* See an amusing account of the summer outing of a Genoese bourgeois family by Mrs. A. Comyns-Carr, *North Italian Folk*, London, 1878, p. 263 *seq.* Cf. *ibid.*, p. 125, *seq.*

Working Classes, 1866, p. 4). Such complaints are not wholly without foundation, and the local separation of the rich from the poor and of the middle ranks from those below them has some injurious consequences; but in the main is not a cause but an effect of discord and repulsion.

The case of those who live away from their place of business because they prefer to live far from it, must be distinguished from the case of those who live away because they cannot afford or are not permitted to live near it; and these have the fatigues of an enforced unwelcome walk or journey twice a day superadded to their toil. This evil is part of that modern social malady which we may call deficiency in the dwellings of the common people, and which indeed, calls for our attention.

§ 190. It is convenient to distinguish the different evil features, though generally several of them, and sometimes all, are found together. There can be deficiency in the quality of the dwellings, and again in their locality, and thirdly in the reasonableness of the price exacted for them, and fourthly in their tenure or in the conditions of owning them, and lastly in their quantity, that is, they may be too few or too small. Let us briefly illustrate each of these five deficiencies.

The quality of a house may be deficient not only in regard to the higher demands of beauty and culture (§ 188), but also in regard to the demands of health (§ 183): being on a damp or infected foundation, with damp or tottering walls, ill-drained, ill-supplied with water,* shut out from light and air, with no separate place for a washhouse, and so forth; and the original sin of the dwelling may be supplemented by dilapidation, broken windows, leaking roof, plaster peeling off, woodwork breaking away, and the whole completed by an accumulation of filth, partly voluntary, partly, from the state of the house, inevitable. That many of the inhabitants of this kingdom are still, in spite of many praiseworthy efforts in recent years, compelled or induced to live in dwellings marked by some or all of these deficiencies, can be seen

* The horrors of the water supply in the poorer quarters of London, the filth, hardships, quarrelling, stealing, crass negligence of landlords and overseers are described by W. Humber, *Water-Supply of Cities and Towns*, 1876, pp. 248, 249.

by any one for himself who chooses to examine our towns and suburbs, our manufacturing villages and country hamlets ; and there is a whole literature, sanitary and philanthropic, on the subject.* And many illustrations could be drawn from abroad, notably from the great cities of Germany.†

* Miss Octavia Hill, *The Homes of the London Poor*, 1875, p. 34, describes some poor dwellings in Marylebone she bought about the year 1865 as follows : "The plaster was dropping from the walls ; on one staircase a pail was placed to catch the rain that fell through the roof. All the staircases were perfectly dark ; the banisters were gone, having been burnt as firewood by tenants. The grates, with large holes in them, were falling forward into the rooms. The washhouse, full of lumber belonging to the landlord, was locked up ; thus the inhabitants had to wash clothes, as well as to cook, eat, and sleep in their small rooms. The dust-bin, standing in the front of the houses, was accessible to the whole neighbourhood, and boys often dragged from it quantities of unseemly objects and spread them over the court. The state of the drain-yard was in keeping with everything else. The pavement of the back-yard was all broken up, and great puddles stood in it, so that the damp crept up the outer walls. One large but dirty water-butt received the water laid on for the houses ; it leaked, and for such as did not fill their jugs when the water came in, or who had no jugs to fill, there was no water. The former landlord's reply to one of the tenants who asked him to have an iron hoop put round the butt to prevent leakage, was, that 'if he didn't like it' (*i.e.* things as they were) 'he might leave.'" Many examples of bad dwellings are given by J. Hole, *Homes of the Working Classes*, 1866, pp. 10-22, and especially a graphic account of Leeds towards the middle of this century, pp. 127-135. And the continuance of miserable unhealthy houses has sometimes a very simple explanation. A Report he cites, p. 45, notices "the fact that the wretched houses which too many of the labouring classes now [about 1864] inhabit are, in their present condition, highly remunerative to the landlords ; consequently such houses fetch a high price when brought into the market. They may be made to yield a good profit in the hands of those who care nothing for the moral and physical well-being of tenants ; but the expense of putting them into sanitary condition, and adapting them to the wants of respectable working men, reduces the returns so much so as to render the undertaking in a commercial sense, unprofitable." In the country the low, damp, ill-ventilated and ill-drained cottages have been for half a century a standing complaint. See the references given *infra*, § 192, note.

† In Hamburg rows of small dwellings about two stories high for the working classes are built at the back of the houses forming the street, are reached by long narrow courts, and are divided into small compartments of two or three small rooms each, uncomfortable and often unhealthy, but rarely unoccupied (*Parliam. Papers*, 1870, vol. lxvi. p. 330). According to Schwabe, apud Roscher, *Ansichten der Volksw.*, 3rd ed. i.

For the great bulk of the working classes the advantage of living close at hand to where they work is very great. But this advantage has to be foregone by many in town and country unable to find lodging near the factories, warehouses, and shops, or upon the farms where they are working. Thus almost all who are employed in the central part of London have to come from some distance, as the houses of the poorer classes in that part have almost all been pulled down. Workmen's trains and tram cars for those employed in a large town, mitigate but cannot remove the consequent addition of toil or expense: there is no such mitigation in the country, and the agricultural labourers have often to walk two or three miles to their daily task, and when it is over again to plod two or three miles wearily home. Nor let us forget the grave moral dangers to which young workwomen in their daily double journey between their dwelling-place and place of business, may be exposed.

A worse deficiency is that of houses at reasonable charges. Already I have given examples of extortionate charges (*supra*, § 182) for miserable rooms in the East of London; and the evil is of many years' standing and seen in other quarters of the town. In the discussions on overcrowding about the year 1865 it appeared that the poor wretches who lodged in the miserable dens of St. Giles's (central London) paid rents averaging £6 per thousand cubic feet, as much as was paid for the most aristocratic mansions in London (Hole, *l. c.* p. 40). In Kensington at the extreme West whence many of the poor have been removed recently to make way for large houses, shops, and gardens, rents have risen till

pp. 368, 369, in Berlin between 1867 and 1871 the two worst classes of houses without any room having a stove or fireplace (*heizbares Zimmer*) or with only one such room, rose from 50·6 to 55·1 per cent. of the total number of houses; and the cellar dwellings increased by some 34 per cent.; those without kitchens by some 77 per cent.—The cellar-population in 1867 already numbered over 63,000, or 9 per cent. of the population.—In America the labouring classes are generally well-lodged even in the towns; but New York is a notable exception, where, according to Mr. Archibald's report (*Parliament. Papers*, 1872, LXII. pp. 637–640), some half of the immense population live in 'tenement houses,' dear, crowded, demoralizing, with common central staircase, often badly built with fraudulent materials, and filled with stench from bad sewerage.

3s. 6d. or 4s. a week is paid for a single wretched unfurnished room. In Southwark or parts of it, according to a trustworthy account about 1874 (Clifford, *Agricult. Lock-Out*, p. 210), a front room twelve feet square would let for 4s. a week, and a back room eight or nine feet square for about 2s. 6d. to 3s., not to speak of washing and drying having to be done in the dwelling room, with sometimes only one closet for five or six families. In the large towns of Central Europe, Paris and Berlin, Vienna and Pesth, house rent has grown with their growth and weighs like a heavy burden on the working classes, making it impossible for most of them to establish anything like a comfortable home; and they are often compelled by rent-raising to quit their abodes, and to suffer the many losses, as of custom and patronage, that may be incidental to it (Engel, *Die moderne Wohnungsnoth*, 1873, pp. 8-13, 17-19, 40). Recently bitter complaints of evictions and rent-raising have come from Paris, and the drastic remedies proposed of all rents to be fixed by municipal authorities, or even the expropriation of all landlords by the municipality, perhaps shew the acuteness of the suffering (*L'Association Catholique*, August, 1881, pp. 282-3).

§ 191. The fourth deficiency regards the tenure of dwelling houses or the manner in which they are owned and occupied. Some of the evils of bad tenures have already been described (§ 186, 187). Here let us notice the dependence, sometimes utter and abject, in which poorer tenants, from the manner in which they hold their lodging, may be placed, and the consequent power in the hands of house-proprietors or middlemen. To denounce all dependence is to betray ignorance or contempt of the nature of man and society. The only question regards the sort of dependence and in what hands are placed power and responsibility. Where large landlords and employers control the houses of their workpeople they indeed possess tremendous power and may use it very badly; but not of necessity; they may use it well, and there may be social institutions that make it likely that they will use it well. The evil I now wish to indicate is the control of the dwellings of the poor by petty tradesmen, speculators, and middlemen, almost irresponsible, a miserable

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race, seldom able, seldomer willing to fulfil the duties of their office, cruelly extortionate, sometimes even directly fostering drunkenness and immorality.* They may be the complete owners (freeholders) of the property ; more often they have house-owners or ground-landlords above them ; but in any case they are the immediate rulers of the poor lodgers ; and this is what is the chief matter. In Berlin the oppression of house-lessors is felt, not merely as in England by the common labourers, but by a number of the middle class who are obliged, unlike us, to live in flats, have to suffer humiliating and oppressive regulations, cannot get a lease for more than a year, are liable to the extortionate

* Let us hear their sins of commission and omission from the personal experience of Miss Octavia Hill, *l.c.* pp. 20, 21. "The influence of the majority of the lower class of people who sub-let to the poor is almost wholly injurious. That tenants should be given up to the dominion of those whose word is given and broken almost as a matter of course, whose habits and standards are very low, whose passions are violent . . . is very sad. It seems to me that a . . . power is in the hands of landlords and landladies . . . either of life or death, physical and spiritual. It is not an unimportant question who shall wield it. There are dreadful instances in which sin is really tolerated and shared ; where a lodger who will drink most with his landlord is most favoured and many a debt overlooked, to compensate for which the price of rooms is raised ; and thus the steady and sober pay more rent to make up for losses caused by the unprincipled." And further on (*ibid.* pp. 67, 68) she describes how "the landlady to the London poor is too often a struggling, cheated . . . woman . . . embittered by loss ; a prey to the worst lodgers whom she allows to fall into debt, and is afraid to turn out, lest she should lose the amount they owe her ; without spirit or education to enable her to devise improvements, or capital to execute them—never able, in short, to use the power given her by her position to bring order into the lives of her tenants : being, indeed, too frequently entirely under their control. There is a numerous class of landladies worse even than this—bullying, violent, passionate, revengeful, and cowardly. They alternately cajole and threaten, but rarely intend to carry out either their promises or their threats. Severe without principle, weakly indulgent towards evil, given to lying and swearing, too covetous to be drunken, yet indulgent to any lodger that will 'treat' them ; their influence is incalculably mischievous."—In some of the country villages, says the Seventh Report on Public Health (*Parliament. Papers*, 1865, XXVI. p. 11), "cottage-speculators buy scraps of land which they throng as densely as they can with the cheapest of all possible hovels." On the colliery villages see *sup.* § 187, note p. 377 ; on small tradesmen as extortionate cottage-speculators, *sup.* § 182, note.

raising of rent and arbitrary evictions, and are often driven in fact to shift their lodgings.* And this dependence on the house-proprietor (*Hausherr*) is "plainly the worse, the more frequently the person of this proprietor is changed by speculative sales, now sometimes effected by the mere transfer of a broker's memorandum (*Schlusszettel*); and the worse also, the oftener the proprietor is an uneducated man, and not even a rich man. Only a fifth at most of the value of Berlin houses belongs, according to Stolp, to the Berlin house-proprietors" (Roscher, *Ansichten der Volkswirtschaft*, 3rd ed. I. p. 374). And if matters are at the worst at Berlin, they are bad in other towns of the German and Austrian empires. As long ago as 1857 it could be said of the inhabitants of Vienna that in recent years they had quite lost the feeling of being settled, and could not be secure of their dwelling from one half-year or quarter to another. And bitter complaints come from many other towns (Engel, *l. c.* pp. 6, 7). Indeed so

* In the year 1872 it has been reckoned there were as many moves as there were lodgings, and a dead loss of some million thalers in moving, an extreme of forced vagabonds' life that cannot have lasted. For this and other facts concerning Berlin see Engel, *Die moderne Wohnungswirthschaft*, 1873, pp. 3-5, 7, 12, 13, and Appendix III. where he gives a blank form of a Berlin contract of lease (*Miethe-Kontrakt*), a startling proof of the abject position of the lessees in the flats. Some of the numerous provisions may be excused by the need of keeping order among tenants; but other clauses shew plainly how unequal are the two contracting parties: "Non-payment of the rent . . . on the day fixed annuls this contract completely, so that the lessee upon demand of the lessor without any previous notice must instantly quit the premises under pain of exmission, and is bound all the same to pay before quitting the full rent for the term of the contract" (§ 2). "The lessee must make no objection, whether it inconvenience him or not, to the lessor at any time, without giving him any compensation, having alterations or repairs, plastering among them, done in or about the house, according as the lessor thinks necessary or suitable" (§ 5). "The furniture which the lessee brings into the dwelling must not be hired from a furniture dealer by the month, nor any third party in any other way have any claims to it, but must be completely the lessor's own, and is to be held, as well as all objects brought into the house, pledged to the lessor for the due payment of the rent for the term of this contract. Wherefore the lessee without the lessor's permission, may not remove any article of this furniture from the dwelling until the rent agreed on in this contract has been entirely paid" (§ 11).

desperate is the case of the Germans that they have trampled alike on the proprieties of language and the facts of history, and have invented, to express their abject relations to their house-proprietors, the word *Wohnungsfeudalismus* (or feudal relations for dwelling-houses), though precisely in what are known as the feudal times, the tenants did *not* live in flats and were *not* liable to arbitrary eviction.

§ 192. The last on our list of failings relates to quantity, that is, where the rooms or the houses are too few or too small, and therefore overcrowded : an evil which may vary in its consequences from occasioning physical discomfort and an unpolished life, to being a source of ill-health, disease and death, a source of conspiracies, thefts and drunkenness, a source of discord, disobedience, hatred, a source of moral degradation beyond words. The evil is wide-spread. In Vienna between 1800 and 1856 the population increased 110 per cent., the number of houses only 40 per cent. In 1830 there were 42 persons on an average in each house, in 1856 there were 52 (Roscher, *Ansichten*, I. p. 367). Unless there was of old a great superfluity of house room, or unless of late there has been a great enlargement of each house, these figures indicate overcrowding ; and more indubitably those of Pesth in 1870, where out of a population of 200,476 some 30,000 lived in rooms (Zimmern) having more than 8 inmates, 13,000 in rooms having more than 9, 1,200 in rooms having more than 19 (*ibid.* p. 369). And for Germany Engel notices as characteristic miseries how "the being forced to take in strangers into dwellings not meant for it and not large enough for it, by sub-letting (*Aftervermietung*) and taking in lodgers for the night (*Schlafstellenhaltung*), acts most disastrously on the sanctity, morality, and general welfare of the family life ;" and how "the crowding families and single persons into the buildings known as 'lodger barracks' (*Miethskasernen*) is very dangerous for the public health and very conducive to quarrels among the inmates" (*Die moderne Wohnungsnoth*, p. 13). And many other examples might be given from abroad ;* but let us look to

* According to official reports there were in the year 1867 in Berlin 15,574 overcrowded dwellings, that is with six to ten inmates to one room with fireplaces, and ten to twenty inmates to two rooms with fire-

England where overcrowding has been perhaps most prevalent and probably most mischievous.

I scarce know what to say and what to leave unsaid, so numerous are the witnesses, so trustworthy the evidence, so abominable and revolting the details. Let it suffice, putting in foot-notes a few citations and references, to mark how from various causes there has been in much of the open country a deficiency of cottage room, and how from another set of causes, the want of religion conspicuous among them, this deficiency has acted as a virulent moral poison;* and again how similar results have

places. (*Berlins sittliche und sociale Zustände*, Freiburg im Breisgau, 1872, pp. 39, 40.)—In 1869 Mr. Pakenham in his report on the industrial classes of Belgium, speaking of the lowest class of workmen, said: "Their lodgings are simply deplorable; they herd together in the most dismal streets of the great cities or crowd the damp hovels which surround the country towns and the pit-mouth; their dwellings are as fine a field for epidemics . . . as it is possible to conceive, as they are seldom able to afford more than one room, to which a lodger is frequently admitted. The moral taint of overcrowding falls heavily upon them. . . . A room about 14 feet by 10 in one of the most prosperous faubourgs contained a few days since, a father and mother, a dead child, a boy of six years, a baby at the breast, and two taken in to nurse, a state of things rather remarkable from the locality; for in the low town and the older blocks concealed by fashionable streets, it would, perhaps, be rather the rule than the exception." (*Parliamentary Papers*, 1870, pp. 463, 464.)—An explorer and eye-witness, the Viscount O. C. d'Haussonville, describes in detail the horrible overcrowding in modern Paris, *Revue des deux mondes*, 1 Juin, 1878, 15 Juin, 1881, 1 Oct. 1881.

* Perhaps in the country matters were at the worst in the decade 1860–1870. An Act of 1865 (The Union Chargeability Act) removed one of the motives for not providing cottages or even for pulling them down, an odious practice, done with the aim of removing the poor to another parish and thus lessening the poor rates in one's own parish. The Seventh Report on Public Health (*Parliamentary Papers*, 1865, Vol. XXVI.) and the First Report on the Employment of Women and Children in Agriculture (*Parliamentary Papers*, 1867–68, Vol. XVII.) contain many lamentable accounts. Between 1851 and 1861 a positive decrease of house room was found in 821 parishes and townships though the population had slightly increased. On Wales for example, the Commissioners sum up, that through lack of cottage accommodation come "overcrowding and the consequent want of privacy," and also "the system of farmers domiciling the male servants in outhouses, barns, haylofts, etc. . . . To the overcrowding and to the . . . domiciling the male servants on farms as above described, entirely removed from the control of

followed from the overcrowding so frequent in our large towns and manufacturing villages: evils so dreadful as to make our head dizzy and heart sick as we consider them; evils so intolerable, that, did we not know that many successful attempts had been made to mitigate them, and that measures were possible to make them shrink into insignificance, we should be tempted to abandon all study of social life, all efforts for its amendment, in despair.*

the master, are traced the immorality so generally imputed to the labouring classes in Wales" (*Parl. Papers*, 1870, Vol. XIII p. 13). Referring to the dwellings of Norfolk, Suffolk, Essex, Sussex and Gloucestershire, they avow "it is a hideous picture, and the picture is drawn from the life It is impossible to exaggerate the ill-effects of the present state of things in every aspect, physical, social, economical, moral, intellectual (*ibid.* 1867-68, XVII. p. 11). A doctor reported: "A young woman of 19 having fever, lay in a room occupied at night by her father and mother, her bastard child, two young men (her brothers), and her two sisters, each with a bastard child—ten persons in all. A few weeks ago thirteen persons slept in it" (*ibid.* 1865, XXVI. p. 14); and so on *ad nauseam*. More recent examples are given for the West of England in 1872 and 1873 by Mr. F. G. Heath, *The English Peasantry*, 1874, pp. 50-53, 61-63, 123, and for the Eastern Counties in 1874 by Mr. F. Clifford, *The Agricultural Lock-Out*, pp. 35, 36, 48, 190-197. But the evil dates from many years back. See R. Pashley, *Pauperism and Poor Laws*, London, 1852, ch. xiv., and the abundant and dreadful account given by Joseph Kay, *The Social Condition and Education of the People in England and Europe*, London, 1850, Vol. I. pp. 470-572.

* For the conditions of the dwellings of the urban and manufacturing poor in England about 1840 to 1850 see Kay, *l. c.* I. pp. 430-432, 447-469; Pashley, *l. c.* pp. 46-52. For more recent times let us hear the testimony of a former workman—*experto crede*—and eye-witness, Mr. Thomas Wright:—"The home life of a vast number of the working classes is something simply horrible—'a thing to shudder at, not to see.' It is a life that puts decency out of the question; and so degrades those condemned to it that they live like the beasts In a dozen parts of London, and in some one or more 'low' quarter of all our large manufacturing towns, there are hundreds of houses in which—

'Packed in one reeking chamber, man,
Maid, mother and little ones lie;'

each apartment being tenanted by a family Nor is this state of things—in the Metropolis at any rate—confined to what are usually classed as the 'low' districts There are numbers of comparatively roomy, respectable, and cleanly-looking streets—many of them quite new streets—in which the same overcrowding prevails It is at

§ 193. But before looking at the grounds for some comfort or hope, let us ask how the evils we are considering have come about. It is no simple inquiry, for the causes are many and complicated; nor will I attempt more than a slight and provisional explanation.* We may begin by noticing how one kind of deficiency in the dwellings of the lower classes may be an immediate cause of another. Thus exorbitant rents or prices for dwellings may cause them to be overcrowded; the insecurity of their tenure may lead to their being badly built. And evils may form a horrid circle perpetuating each other. Thus overcrowding may reduce the people to the level of pigs, and then they in their turn will reduce the best of dwellings to the level of pigsties, and night that the signs of the overcrowding . . . shew themselves. The lights in every window, and the numerous shadows that may be seen flitting about, tell of each room having its family; and in the hot summer time . . . the little crowd seated round each doorway, or lying about on the pavement in front of the houses, give some idea of the number crowded into a single dwelling." Nay, he knows "parts in London where not only houses but even single rooms are sublet . . . Decency and cleanliness cannot be maintained among the respectable poor; among the reckless poor there is no attempt to maintain them. When in the summer evenings the latter class lounge and loaf about outside their vermin-invested dwellings, 'chaff' of the most ribald and blasphemous character is freely bawled out regardless of the presence of the ragged children who are playing about, and who are picking up the language of their elders, often as their first instruction in the art of speech. The bringing up of the children is perhaps the most horrible feature of all in this matter." But I will not transcribe any further the sickening tale of corruption (T. Wright, *Our New Masters*, 1873, pp. 48-53). Mr. Hole complains of "many thousands of dwellings in our large towns and in the agricultural districts where the allowance of space is not 100 cubic feet each" (*The Homes of the Working Classes*, 1866, p. 12); of the mischievous prevalence of common privies (pp. 15, 16); of the flagrant disregard in ordinary houses of the separation of the sexes (p. 44); and gives various dreadful examples of overcrowding (pp. 12, 13, 43, 125). Similar examples by Mr. Francis Peck, *Our Laws and Our Poor*, 1876, pp. 34-38, 124, 125; a fearful picture from Liverpool in *The Times*, 4 Dec. 1877; and from Whitechapel, *ibid.* 22 June, 1881.—Let these references and citations suffice; for I am but illustrating an economical theory, not writing a history of modern English 'Wohnungsnoth,' or any other.

* I have followed in some points Schäffle's suggestive 'Excursus on the dwelling-house question' in his *Nationalökonomie*, II. pp. 548-557, 3rd edit. 1873

almost prefer to be overcrowded. But let us go back a little further in the train of causes, and distinguish a few heads. The first is the growth of large towns, on which as characteristic of our century, I have already spoken (*sup.* § 128), and endeavoured to explain (*sup.* § 129–132). This rush into cities has given opportunity to exact immense prices for houses and building sites, and has put into the hands of certain classes of persons immense power over the fortunes and happiness of others, power often notably abused. A second head of causes of bad dwellings is the irresponsibility of modern employers and workmen and the speculative and fluctuating character of modern industry in Western Europe. This cannot be properly illustrated till, in the next book, we have examined the different sorts of economical constitutions and their history; and we must here be content to note briefly that if a man is to have a permanent home he must have a secure industry near at hand; that shifting and oscillations of industry are likely to cause at least temporary overcrowding; that if workmen can be taken on or turned off at pleasure without the employer being liable for the consequences, he is not likely to make sure that they can get in either case a proper habitation; that if no ties of law or custom bind them to him, he is not encouraged to concern himself with their welfare. A third head, in England at least, is the faulty law of house-ownership, which has already been fully illustrated (*sup.* § 187). A fourth head is the absence or neglect of proper municipal, sanitary and building regulations. There may be no fit plan for the enlargement of the town, for the arrangement of streets and open spaces, for supplying water or removing refuse, no prohibition of bad building-materials and bad modes of construction, no requirement of periodical and frequent whitewashing, of smoke-consuming furnaces and fireplaces, of sufficient air space for each inmate. Or regulations abundant and excellent may for the most part be set at naught.* A fifth head

* Mr. Hole has many complaints on the neglect and misgovernment of English local authorities. J. Hole, *The Homes of the Working Classes*, 1866, pp. 23–32, 128, 129, 139, 144. On how the Lodging House Law was being left unenforced or feebly enforced, see *Dublin Review*, July, 1874, pp. 36, 37, with references to James Greenwood, *In*

comprises the ignorance, the poverty and the degradation of the common people as acting injuriously on their dwellings : ignorance of the rules of health ; poverty taking away all choice of dwelling, all resistance to overcrowding, all chance of making tidy, much less of adorning ; degradation removing even the inclination for room and order and cleanliness. Often the immediate and palpable gain in money through taking in lodgers blinds a poor family to the remote, obscure and gradual injury that come thereby to health, happiness and morality (Hole, *l. c.* pp. 5, 6). A sixth head is the deliberate destruction of the dwellings of the poor. This was for long, perhaps still is, a characteristic of rural England. "One of the most substantial grievances of rural labourers," says a witness on this matter above suspicion, "has been at the hands of landed proprietors, who have pulled down or refused to build cottages on their estates for the labourers habitually employed thereon" (*Quarterly Rev.* No. 132 (Jan. 1872), p. 276). The main inducement, removed in 1865, for this violation or neglect of duty was, as already noticed (§ 192, note p. 389) to escape poor rates ; and thence came the curious distinction of *close* and *open* villages common through all the Midlands and East of England : the close villages in parishes controlled by a few large owners and containing few inhabitants except regular servants, as shepherds, gardeners, and game-keepers, a beautiful and orderly shew village ; the open villages on the other hand disorderly, squalid, repulsive, the work of squatters and speculators, in parishes where the land was in many hands, and whither the labourers evicted from the surrounding close villages had to find what refuge they could (*Parliament. Papers*, 1865, Vol. XXVI. pp. 10, 11, 135). And what sort of refuge we have seen. Moreover in London it has been calculated that in the ten years 1862–1872 upwards of 150,000 persons were unhoused by demolitions (*Quarterly Rev.* No. 132, p. 275) ; nor except for an insignificant fraction of this evicted multitude were any fresh dwellings provided by the

Strange Company. On how the local authorities of Kent and Sussex have refused to apply the remedies provided by Parliament for the horrible evils of the hop-picker's lodgings, see *The Times*, 12 Oct. 1881 (letter by H. C. Burdett).

individuals or private companies or public bodies who drove them out.* Each demolition for the sake of shops and warehouses, banks and offices, streets and railways and public buildings helped to overcrowd the yet undemolished houses of the poor in the neighbourhood, and to compel the majority to live at a distance from their work, a serious hardship and loss for most, and for some, as those working at night in the hot air of printing works, a cruel injury.† And though London is conspicuous in the ejectment of the poor, it is not alone.‡

But I have said enough to illustrate this cause of deficient dwellings, nor is it necessary now to push the inquiry further back and ask the deeper causes why the poorer classes have come to be considered and in a way really to be, in parochial phrasology, a nuisance to a respectable neighbourhood.

* One notable feature has been that large spaces after the poor and their houses had been removed, lay vacant for years, notably about Farringdon Street, and also the ground now occupied by the New Law Courts.

† Various details of the demolitions of dwellings and ejectments of the lower classes in the centre of London are given by Mr. William Gilbert, *The City*, 1877, pp. 10-12, 17-33, 37-48. The Corporation of the City of London appears in anything but an amiable light. To escape poor rates and to enjoy vast endowments meant for poor parishioners, appear to have been among the motives for removing the poor. At present the desire to escape the Inhabited House Duty acts mischievously in preventing clerks and others being lodged at the business premises. In 'residential' districts like Kensington many workmen's houses have been recently demolished to make room for 'genteel residences' or even 'first-class mansions.'

‡ Mr. Henry Roberts, *The Dwellings of the Labouring Classes*, revised ed. 1867, after noticing the frightful huddling together of the displaced population through want of compulsory provision for them when Victoria Street, Westminster, was made, says (p. 47): "The same neglect on the part of the Government was the cause of an incalculable amount of suffering in Paris, when the people who tenanted its narrow and winding streets were forcibly ejected, and often their few articles of furniture placed on the *pavé*, they themselves not knowing where to seek shelter. I visited more than once, in the spring of 1858, a kind of encampment of 600 such families . . . and heard from some of them their pitiable tale, and the exorbitant rent they were paying for temporary hovels, which the police had warned them would be pulled down in three months, and they forced to go again they knew not whither."

§ 194. The dreadful evils we have been considering neither need be nor have been let alone ; and many efforts have been made against them, some with a certain measure of success. We can distinguish the action of government, of employers, of benefit societies and of charitable persons or bodies. One part of the action of government has been the removal of mischievous laws which formerly helped to make dwellings deficient ; notably the repeal in 1851 of the tax on windows and on bricks, and the alteration (by the Union Chargeability Act, 1865) of the mode of levying poor rates, so that they could no longer be escaped by clearing the poor out of one's own parish. Further, there has arisen a gigantic body of sanitary law and municipal regulations, which, had the powers granted been used and the rules enacted been enforced, would have made an end of the worst class of dwellings, and even of overcrowding as far as injurious to health. Although the results have hitherto fallen far short of this, not a few good results have been attained, and the undoubted improvement in the health of our large towns is in great part due to sanitary legislation. Some intolerable abominations, as the former license of common lodging-houses, and cruelties, as the use of bakehouses to sleep in, have been prohibited ; and in general we need a reform not so much in the letter of the law as in its application and enforcement.* But sanitary legislation in itself only prohibits unhealthy houses, and does

* On the letter of the law see G. F. Chambers, *A Digest of the Law relating to Public Health*, 7th edition, 1875, and supplement 1877, a formidable-looking work and yet so well written and arranged as to make a portion even of English Law intelligible. The Public Health Act, 1875, has 343 clauses and occupies 164 pages. Local authorities can frame By-Laws on the following among other matters : Level, width, construction and sewerage of new streets. Walls, foundations, roofs and chimneys of new buildings so as to secure stability, prevent fire, and for the purposes of health. Ventilation of buildings inside and out. Drainage of buildings ; water-closets, etc., ash-pits, cess-pools ; and closing of buildings unfit for habitation. Number of lodgers who may be received into a common lodging-house ; and the separation of the sexes ; promoting cleanliness and ventilation in such houses ; notices and precautions as to infectious diseases ; generally for the well ordering of such houses. Also analogous regulations of other lodging-houses if the permission is got of the Local Government Board. A 'Common Lodging-house' means a house where persons are lodged for hire for less

not provide healthy ones, much less the opportunity of a secure and happy home. Public authority has however done something even here. Powers were granted by two acts of the year 1847 to town councils and parochial vestries to establish baths and washhouses, which though not dwellings, serve almost like the addition of a fresh room to each dwelling; and the powers have sometimes been used, though in the main neglected (see Hole, *l.c.* pp. 145–151; Chambers, *l.c.* Part I. p. 43). And even some dwelling-houses for the working classes have been built at public expense in virtue of various Acts of Parliament. So in Glasgow (by a special Act of 1866) official trustees have acquired at a reasonable price various overcrowded and ill-built areas, have demolished them by degrees and with foresight, spending much on temporary remedies, as whitewashing and ventilating, have not displaced any inhabitants till it was ascertained that there were dwellings for them elsewhere not far off, and have built over 9,000 houses suited for the very poorest class (H. R. Brand, *Fortnightly Review*, Feb. 1881, pp. 226–228). The Artizans' and Labourers' Dwellings Improvement Act, 1875, was passed to enable unhealthy areas in large towns to be cleared and healthy accommodation on or near the same spot to be provided for at least as many of the working classes as had been displaced: a laudable endeavour marred by two great defects, one, the lack of provision for the displaced population during the process of demolition and reconstruction,* the other (somewhat amended

than a week. Some corporations have for long enforced local regulations preventing back to back houses and providing proper conveniences for each house. So Manchester since 1844 and Bradford since 1860. See James Hole, *The Homes of the Working Classes*, 1866, pp. 35–38.—Abroad the French law of 1851 wherever applied has worked a great improvement in the healthiness of dwellings, especially by preventing cellars being inhabited (*The Times*, 16 Aug. 1875). In Belgium the police regulations of Antwerp require that cottages cover 40 square yards for each family, a rule found of great benefit to health and morals (*Parliamentary Papers*, 1871, p. 77); and there are many other sanitary regulations there in force (*ibid.* pp. 83, 84).

* The misery to which this defect leads can be judged of from the following graphic account given in *The Times*, 5 July, 1877:—

Evictions.—A distressing scene was witnessed on Tuesday near

in 1879), the absurd prices paid to the owners of the unhealthy property—perhaps six or seven times what was their due (*Cf.* Brand, *l. c.* pp. 222–224).

From abroad many examples might be given of Govern-

Fetter-lane. Blewitt's-buildings, a blind court running eastward from the northern end of that thoroughfare, and containing about 20 houses, or rather hovels, has been in such a wretched state for some time past that the Metropolitan Board of Works obtained the necessary orders to have them razed to the ground, in order that artisan's dwellings might be erected in their place. The usual three months' notice to quit was given, but the majority of the tenants, the poorest of the poor, living whole families of them in single rooms, had either forgotten the legal reminder or were unable to get other lodgings. On Tuesday morning, therefore, the authorities entered the court, accompanied by a *posse* of police, and proceeded, as one old woman said, "to chuck the sticks out o' winder." There were, however, very few "sticks" to take out, and in the course of an hour or two every house was empty and every door nailed up. Men, women, and children, broken crockery and hardware, old wooden bedsteads and mattresses, were then huddled together in the court. As the day advanced a few of the evicted tenants managed to get other lodgings hard by, but most of them being unprepared with money were quite unable to do anything but bewail their hard fate and keep an eye upon their things. The police frequently came round to tell the houseless people to "stir up and get out," but were utterly unable to make them move. The scene during the day was rendered more and more dreadful by the heavy thunderstorm which broke at intervals over London, and which drenched the women and children to the skin and saturated the goods. Children came from school to find themselves without food, labourers returned to find their wives out at work and their children guarding the furniture. The most gloomy part of the picture was the frightened faces of children, unable to comprehend where they were to sleep or how the goods were to be moved. One woman sat down at 8 o'clock at night upon a mattress saturated with rain, and, bringing her five children round her, waited patiently for the coming "home" of her husband. She had no money to buy food, no place to go to, and no friends to get help from. In three cases the mother and father went out to seek lodgings, leaving all the children to look after the "sticks," and again and again the police had to be called into the court to prevent robbery. At 9 o'clock at night eight of the families were still without shelter and resolutely refused to go to the workhouse and leave their goods to take care of themselves. The majority were Irish, who pleaded that they "had nowhere to go because no one would take them in; they were too poor and had too many children." See also Mr. S. Cassan Paul on *London Evictions* in *Macmillan's Mag.* Oct. 1882, pp. 500–504, and Sir R. Cross in the *Nineteenth Century*, 1882.

ments providing or helping to provide houses for some of their poorer subjects. The Emperor Napoleon III. set aside some ten million francs (£500,000) for subsidizing benevolent efforts like those of the society formed in 1853 at Mulhouse to provide workmen's dwellings (Roberts, *Dwell. of Lab. Classes*, p. 57). In the summer of 1872 the municipal authorities at the German town of Halle set to work to build forty dwellings for the poorer classes at the cost of the commune (Engel, *Die moderne Wohnungsnoth*, p. 55). Gothenburg in Sweden had long before set a good example (*Parliam. Papers*, 1870, LXVI. p. 481). The model houses built by the administrators of the poor at Antwerp are described in Mr. Grattan's Report (*Parliam. Papers*, 1871, LXVIII. pp. 85, 86): 167 well-built houses were finished and occupied between 1865 and 1868, each house having three to six rooms, various conveniences, and a small garden for vegetables or bleaching linen, all for a rent of from three to four francs (2s. 5d. to 3s. 2½d.) a week, a mile indeed from the town and with strict conditions against keeping animals or subletting, and a deposit of 100 francs (£4) required on taking possession; * yet these houses are in great request, and having cost, all charges included, 570,000 francs, yield in rent annually 34,404 or nearly 6¼ per cent.

§ 195. Many employers have deserved well of their country by providing fit houses for their workpeople. In England the Government in its character of employer has done little for the civil but much for the military service, by building magnificent barracks; and soon after the middle of this century a large sum was voted and spent in providing separate dwellings for married soldiers (Henry Roberts, *The Dwellings of the Labouring Classes*, edit. of 1867, p. 62). In Prussia in 1867 some 5,633 officials, or about 8 per cent. of the whole number, lived in dwellings provided by Government (Engel, *Die moderne Wohnungsnoth*, pp. 48-49); and the paternal care of the same Prussian Government during many years past for the workmen in the mining works be-

* He may indeed pay only 25 francs at first, and make up the rest gradually by instalments of half a franc a week. He receives 5 per cent. interest on his deposit.

longing to it is a bright page in its history.* Turning to private employers, the examples of Mr. Titus Salt and Mr. Edward Akroyd are given by Mr. James Hole (*The Homes of the Working Classes*, 1866, pp. 66–72) of English manufacturers building suitable dwellings for their workpeople, and shewing what can be done; many other names might be added; in the country many large landowners like the late Duke of Bedford (Roberts, *l. c.* p. 19) have made serious efforts to provide fit cottages for the labourers on their estates; while on the Continent a long list might be made of employers who have sought to secure happy homes to their workpeople.†

* Aiming at having a settled population in their own homes close to the mines, the State advances to the workmen employed a sum of money to build their own houses with. Part of this sum is a donation or premium varying from 250 to 300 thalers (£37 to £44), part is a loan free from interest. The loan may be as much as 500 thalers, and is repaid in yearly instalments of from 8 to 12½ per cent. In many cases, especially in Upper Silesia, the land is given gratis in plots of one-half Morgen (nearly one-third of an acre), and the State has spent large sums (between 1850 and 1870 some 605,300 thalers) in buying land for the workmen to settle on. The foregoing advantages are only granted in general to married workmen. Where for some cause they cannot be induced to build, the State itself erects houses and lets them at a moderate rate. Moreover dormitories and common-rooms have been provided for the unmarried workmen who come to the mines for the week and return to their homes for the Sunday. Engel, *l. c.* pp. 46, 47.

† An account of the dwellings for families (*Familistère*) at M. Lemaire's iron foundry at Guise in France is given by Mr. Hole, pp. 164–170. See references Périn, *De la Richesse dans les Sociétés Chrétiennes*, 2nd ed. II. p. 334. Among the other good works at the ironworks of Denain has been the construction near them of dwellings at a low price (*Ibid.* II. p. 338). M. Harmel near Reims has endeavoured to provide his workmen each with a separate house and garden at moderate rents.—Where a number of girls are employed there may be advantages in their being lodged together instead of returning daily to their homes. Thus at Lowell in Massachusetts several thousand girls from the rural districts around live together in large boarding houses provided by the manufacturing societies of the city till they are married; and the education and discipline they have received makes them sought after. Similarly though still better at the silk factory at Jujurieux in France described by Périn, *l. c.* II. pp. 341–345, *cf.* pp. 195, 196, where the girls are under the care of nuns.—The town of Mulhouse in Alsace is the seat of a benevolent society, *La Société Mulhousienne des Cités Ouvrières*, founded about 1852 to sell workpeople decent houses at a low

Associations among the workmen themselves have been directed in England with no little success towards providing workmen with houses of their own, and combating the mischievous mode of ownership that prevails (*sup.* § 187). Under the name of 'Building Societies' are comprised in England a number of different associations, some of old growth, favoured by law as early as 1836, but not of serious influence till 1847. Their common feature perhaps may be said to be this, that by the regular and frequent payment of a number of small contributions the contributor sooner or later can have a lump sum paid him to help him to buy a house, or the lease of a house, or land on which to build a house. If all the members wanted to get such a sum, many would have to wait long. But in the common form of a building society only one portion of the members want this house-money, the others want an investment for their savings. Thus commonly we can describe a building society in the words of Mr. Hole (*l. c.* p. 82) as consisting of "lenders and borrowers conjointly: the one using the society as a savings bank, paying in their money by small sums; the other using it as a means for obtaining the money to buy or build houses which they hold subject to a mortgage to the society, until they have paid it off by periodical instalments. . . . The interest received by the lender and paid by the borrower is generally $4\frac{1}{2}$ or 5 per cent. The payment is usually made in shares, the subscription to which is 2s. 6d. per week or 10s. per month." That is, each member takes a share, and this involves a weekly payment till he has paid in the whole share, perhaps £100 or more.* Sometimes it is allowed to take only a fraction of a share as, one-fifth or two-fifths, involving the weekly payment of only 6d.

price, itself making no profit. In twenty-five years it had built 948 blocks of four houses each, and sold all but three (*Contemp. Review*, Nov. 1882, pp. 722, 723).

* As interest is allowed on what he has been gradually paying in, he will be free long before his weekly payments have amounted to the price of the share. Thus the shares of the Leeds Permanent Building Society are £120 4s. 7d. each; but after a shareholder's weekly payments of 2s. 6d. have gone on for thirteen years six months he finds he has paid the price of the entire share, though the total of his weekly payments has only reached £87 10s. 0d. (Hole, *l. c.* p. 172).

or is. The advantages of such societies to the finances of the working man can be great. First, by being 'his own landlord' he escapes paying the allowance made to the rent collector, usually 5 per cent. of the rental, and the heavy insurance that good tenants have to pay for bad ones, and for the risk of the house being empty (*Ibid.* p. 83). And though he might save bit by bit and at last buy a house though he belonged to no building society, he gets extra motives to save by belonging, notably the dread of penalties if he neglect to pay his weekly contribution. Secondly, he becomes his own landlord much sooner than he could without the building society; for in substance though not in form he receives from it a loan at a low rate of interest to get a house with. Without it he might not be able to raise money for such a purpose at all, still less at a moderate interest. Thirdly, he may get his house for much less than if he was not a member. To buy or build much at once saves greatly in the legal costs and architect's charges, in materials and much else. Now the building society can secure this saving either by itself buying and building wholesale and selling retail to its members at wholesale prices, or by making arrangements with third parties in favour of its members. Sometimes by the intervention of the upper classes an impulse has been given to building societies. At one time political motives—the desire to multiply 'forty-shilling freeholders'—caused much intervention and the formation of 'freehold land societies' for buying estates and subdividing them into plots that would give the owner of each a vote. Apart from politics, benevolent employers have co-operated most successfully with building societies by buying land, providing designs or buildings, guaranteeing payments, and in other ways helping the better classes of workmen and the lower middle classes to get homes of their own (*Ibid.* p. 72 *seq.* 87, 88). For the lower layers of the population I think little has been done by building societies. Moreover they have shewn various failings. Some have allowed hideous, wretched and ill-drained houses to be built or have advanced money on them, some have lent on public-houses and beer-shops, some have become little more than financial societies and means of

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speculative investment ; there have been oppressive fines, self-elected committees, arbitrary government, opportunities for injustice, for jobbery, for speculation (*cf. Ibid.* pp. 86, 87, 174). Still, whether these abuses have been frequent or rare, they have not prevented the English building societies reaching immense proportions, as the following official returns for England and Wales in the year 1880 will shew (given in *The Times*, 28 Sept. 1881)* :—

Number of building societies incorporated up to 31 Dec. 1880	1,267
Of these 23 had been dissolved and 21 were in default, leaving	1,223
Number of members	372,035
Receipts in 1880	£18,694,555
Liabilities (of 1,111 of the societies)	
To holders of shares	£21,813,095
To depositors and other creditors	£14,079,762
Balance of unappropriated profit	£1,104,735
Assets :	
Balance due on mortgage security	£34,847,320
Invested in other securities and cash	£2,103,063

Besides the efforts of Government, of paternal employers and of workmen's societies to meet the deficiencies of dwelling places, charitable individuals and bodies have in various ways joined in the work. Large donations of money as the Peabody Fund in London and the Dickson Fund in Gothenburg (*Parl. Papers*, 1870, LXVI. p. 481) have been given for the purpose of providing fit dwellings for the lower classes.

* In Ireland and even Scotland the figures are relatively much smaller. In the American city Philadelphia I have seen stated that the building societies there dating from 1831 have enabled some 70,000 dwellings to be owned in fee by mechanics and men of small means. By paying annually little more than what would be the rent, the free ownership is got in about nine years. I do not know if building societies exist at all in France ; in Germany they are feeble (Engel, *Wohnungs-noth*, pp. 59, 60). But for a special class peculiar to Germany, the many thousands of travelling unmarried journeymen, the need of decent lodgings since the decay of the old guilds has been met by the 'Gesellen-Vereinen' started about 1845 by a priest, Adolf Kolping, and in 1866 numbering over 400 branches and some 80,000 members (*The Month*, 1866, Vol. V. pp. 314, 315). A few years later analogous lodging-houses were started for Protestant journeymen.

Associations having this as their first object and a modest profit only as their second and subordinate object, have been active for many years. Thus the 'Société des cités ouvrières' founded in 1853 at Mulhouse had by the year 1864 built 630 houses, of which 560 had been sold and fifty entirely paid for: each house worth 2,650 to 3,300 francs handed over to the acquirer on payment of 300 to 400 francs followed by monthly payments of eighteen to twenty francs during thirteen or fourteen years (Le Play, *La réforme sociale*, 5th ed. ch. 25, § 3). In England the 'Society for Improving the Condition of the Labouring Classes' founded in 1844 with royal patronage, and the 'Metropolitan Association for Improving the Dwellings of the Industrial Classes' founded in 1842, have as well as other societies and benevolent individuals, built model cottages, model lodging-houses, model blocks of dwellings, duly described often with plans and illustrations in the works of Mr. Hole and Mr. Roberts already cited. And much has been done in Salford, Birmingham, and above all London by the 'Artisans' Labourers' and General Dwellings' Company,' registered in 1867 and having built in the suburb of Wandsworth a workmen's town for several thousand inhabitants. Praiseworthy efforts, lastly, have been made like those of Miss Octavia Hill, buying up miserable houses, repairing and cleaning them, expelling bad characters, allowing no credit for the weekly rent, but trying to improve the tenants morally and materially (Octavia Hill, *Homes of the London Poor*, 1875, ch. I.-III.).

§ 196. The efforts described in the last two sections have not been without fruit; and an undoubted and considerable diminution in the death-rate of towns has resulted from the clearing away of unhealthy and overcrowded blocks of dwellings and from the enforcement of sanitary regulations. But a low death-rate is little gain if the mode of life remains degraded and miserable; and all that has been done is little compared with the need. It has been calculated that in the thirty years ending in 1873, all the efforts of charitable associations and individuals in London provided house accommodation for only 26,000 people, not two-thirds of the mere annual increase, and not one per cent. of the total

population (Octavia Hill, *Homes of the London Poor*, pp. 171, 172). How few the employers who have provided their work-people with dwellings compared with those who have not. How like pouring water into a sieve to put a poor family into possession of a house and home, and then to leave them defenceless against the many modern contingencies that again put them out of possession. Thus a mining company at Decize in France sold to its workmen for 2,400 francs houses costing 3,000 francs; twenty years after only eight remained in the workmen's hands, five were turned into public-houses and shops, and others sold at a profit to speculators (Report in *The Times*, 16 Aug., 1875).* And in England something more is wanted than even the best of building societies, not so much to put our people into decent homes, as to keep them there. The evil is urgent, and to meet it there is need of much more than has yet been done. Let us consider in outline the measures of relief, which can perhaps be catalogued under six heads.

First: Sanatory and building regulations. On these, of which I have already spoken (§ 183, 187, 193, 194), the main point for us is not to ask for new laws, but to use the powers already given and to enforce the regulations already made, a difficult problem which I leave to those versed in local government to solve.† Some new laws indeed are by no means uncalled for, such as the application to all lodgings let by the week of the rules now only obligatory on 'common'

* Similarly at Mulhouse several houses have already passed into the hands of capitalists who let them.—According to the figures in the *Contemporary Review*, Nov. 1882, p. 722, out of 920 houses 341 had by 1877 already changed hands, and 39 of these more than twice. Yet the earliest sale of the houses to the workpeople could not have been more than twenty-five years before, and in most cases much more recently.

† On the many duties of the Surveyor and of the Inspector of Nuisances and recommendations on the sort of people they ought to be, see C. F. Chambers, *Digest of the Law of Public Health*, 7th ed. Part I. p. 35, and Part III. Mere laws are mere words; what matters are the sort of people who apply them and the sort of people to whom they apply. An identical sanitary law may be worked in the cities of England to protect the poor in their hired lodgings, and yet in the villages of Italy may be worked as a horrid engine for oppressing and plundering the peasantry in their freehold cottages. Local self-government in these matters may be the right rule but a rule to which there are exceptions.

lodging-houses; and a law that every master builder and perhaps also every builder's foreman, must undertake no work till he has passed an examination and have a diploma to shew he is competent for an office on which the health and comfort and happiness of thousands may depend (*The Times*, 2 Feb., 1881). And, perhaps further enactments are called for on a proper water supply to each house and each set of rooms. (Cf. W. Humber, *Water Supply of Cities*, ch. xvi.) As a conclusion to this first head of measures of relief, if the expense of such building and sanitary regulations be urged against them, I can repeat the old answer, that if common sense and common justice be used in framing such measures and in carrying them out, their cost is more than covered by the saving of the loss to wealth that comes from sickness, crime and premature death. But naturally sanitary laws like the rest of human legislation can be made the vehicle of folly and oppression.

Secondly: Supply of workmen's dwellings by public authorities. Already we have seen how in certain cases this has been done (§ 194); and much more might be done and in many cases ought to be. If the plea of public interest justifies expropriations for railways, streets, roads, river embankments, and public buildings, the same plea will justify the expropriation of landowners on or near the spots where multitudes have to work, in order to erect houses for the workers.* And rather than let the people remain without

* See the remarks of that sober authority *The Quarterly Review*, Jan. 1872, Vol. 132, pp. 274-278. What is done for means of locomotion for the richer-classes and to foster commercial enterprise, "why should we not do for the far more important and urgent purpose of putting decent dwellings within the reach of the crowded labouring population of our cities—more especially of London." That railways 'pay,' model dwellings don't, is not only not a valid objection, but not even a true statement, as figures can shew. And it is certain "that if half the millions expended during the last twenty years in . . . unprofitable railway undertakings, and half the land taken under . . . Acts of Parliament for such projects, had been devoted to providing fit and comfortable dwellings for the labouring poor of our great towns, much waste of capital would have been avoided, larger money interest would on the average have been realized," and two and a half million people satisfactorily housed. In fact, "no valid objection can be raised to the proposal that henceforth Parliament should grant powers to companies having such an

decent accommodation, local governments should undertake to provide it and central governments to advance the funds. There are dangers of oppression, of jobbery, and of extravagance in such courses; and an example of exorbitant prices paid for dilapidated house property by the authorities

object in view [*i.e.* providing dwellings for the poor], to purchase land and suitable sites in the heart of the metropolis, as readily and as amply as they have parted with them to railway companies. Nay more: it is not easy to say why, if such [building] companies were not forthcoming in sufficient numbers, or with sufficient capital to meet the urgent necessities of the case, the State or the City, acting in the interests of the community, should not lend money to them at any rate of interest beyond that at which they [the State or the City] can borrow it, *plus* an addition for the cost of management; or on such terms as they have . . . repeatedly loaned public funds to private proprietors . . . for drainage of estates and other improvements.”—Similarly, expropriations and government loans are recommended by Mr. Hole, *l.c.* pp. 34, 35, 96 *seq.*, summarized p. 112. —To the charge of this being socialistic, we can first retort that the habit of raising this objection against all economical legislation in favour of the poor is one of the best means, not of discrediting but of promoting socialism. And then we say that any one who is serious can quite well distinguish between the measures proposed of partial expropriation and of the intervention of authority to check abuses of private property, cruel extortion, and the degradation of the poor, from real socialism which confounds use and abuse, turns an exceptional remedy into the rule, and perversely aims at the absorption of private opulence and power by the State, instead of seeking to promote among the higher classes the right use of that opulence and that power. The following proposal of the French Socialists is noticed in *L'Association catholique*, Aug. 1881, p. 283:—“Il serait procédé, pour cause d'utilité publique, à une expropriation générale des immeubles urbains, et les logements rentreraient dans la catégorie des services municipaux, en même temps que le service des eaux, du gaz, des omnibus, tramways, petites voitures, des chemins de fer urbains, des approvisionnements, etc.” Naturally to treat the supply of lodgings like that of water or railways is to confuse what should be distinguished; and because the municipality may rightly undertake the one and entirely control it, this is no reason why it should do the same with the other. How escape arbitrary allotment of lodgings according to the good pleasure of the local officers, and favouritism, jobbery, speculation, or else the reckless competition of needy applicants making lodgings as dear as before? (*Cf.* Schäffle, *Nationalök.* II. pp. 556, 557.) But let us also beware of the other fallacy that because it is an evil for the municipality to own all the dwellings of the town, therefore it is an evil for them to own a part. The amount may make all the difference and it may be a great benefit if they own even as much as a quarter or a third.

in London we have already seen ; but we have also seen the good example of Glasgow, which might be followed. And in many cases easier courses are open, as where a municipality owns lands or houses, and by building on the one and altering the others can provide fit dwellings for the poor at reasonable charges without loss to the municipal revenue ; or where trustworthy societies can be found ready to provide workmen's houses if funds are advanced by Government at a low rate of interest. Again in crowded towns like those of England the supply by the municipality of public baths, washhouses and drying grounds is no ruinous expense (see Hole, *l.c.* Appendix A), may even be profitable, is an immense boon to the poor, is equivalent to building many hundred houses, has been favoured for many years by the law, and yet has been greatly neglected. Finally, under this head can be placed the indirect means of housing the working classes by Government favouring or forcing the construction of bridges, roads, tramways and railways from the place of work to the place of residence of the workmen, and enforcing cheap fares and suitable conveyance, such as 'workmen's trains,' running at convenient early hours and tickets that will serve for the week days of a whole week or month.

§ 197. Thirdly : Supply of dwellings to the employed by their employers. The Government, whether central or local, should in its character of employer provide permanent houses for its permanent servants. In England the whole body of under-clerks and servants in the Government offices, including the Postal and Telegraph service, and the greater part of the work-people employed in arsenals and dockyards, army-clothing and other Government factories, in lighting, cleaning, repairing streets, roads, drains, and similar municipal functions, should have the option of receiving a portion of their salary (perhaps 10 per cent. of it) in the shape of a suitable dwelling near the place of their employment. There is no need to enter into details which may vary with circumstances. Thus in Germany a few years back there was crying need for the Government to provide houses for its middle-class servants, instead of giving them more money which only went

into the pockets of Berlin and other house speculators.* In England the situation is not quite the same. Again the amount of salary to be deducted, the class of house to be provided, the distinction of married and unmarried civil servants, and many other matters depend on local circumstances. But the general principle remains that Government in the present conditions of Western Europe can provide far better and cheaper dwellings for its servants than they can provide for themselves, and can thus greatly benefit them without at all impoverishing itself.

As regards private employers, if all had done as some of whom I have already spoken (*sup.* § 195), there would be no pressing question of dwellings requiring solution. We may preach that it is their duty to provide decent homes for all their workpeople. But what if they turn a deaf ear? We may urge that a fair return can be got for outlay on cottages and great indirect gain from the steadiness and honesty of the workmen when well lodged. But what if they answer, that they are not attracted by the beggarly profit of some 4 to 4½ per cent. which is the most they can reasonably hope on an average to obtain;† and that the alleged indirect benefits are anything but certain, that one philanthropic con-

* Strong recommendations to restore in regard to houses and government servants (Beamten) the old plan of payment in kind are given by Schäffle, *Nationalök.* II. p. 552; Engel, *Die moderne Wohnungsnoth*, pp. 49-52, 57; W. Roscher, *Ansichten der Volkswirthschaft*, 3rd ed. 1878, pp. 374, 377-381, 384-386.

† Saltaire yielded 4 per cent., Copley 4½. See J. Hole, *Homes of the Working Classes*, pp. 68, 71, 91. Even if a larger return can be expected the trouble and risk of such property would from a commercial point of view require much more. Let us hear two benefactors of the poor. "It may be doubted," Mr. Akroyd said in 1862, "whether any landlord building good cottages for his tenantry or a millowner for his workpeople, can obtain a rent which will pay the ordinary rate of interest for cottage property" (Hole, p. 71). In 1850 the Duke of Bedford wrote that "cottage building, except to a cottage speculator, who exacts immoderate rents for scanty and defective habitations, is, we all know, a bad investment of money" (Roberts, *Dwellings of Labouring Classes*, p. 19). And this old experience has not been contradicted by that of more recent time. See T. E. Kebbel, *The Agricult. Labourer*, 1870, chap. III.; Fred Clifford, *The Agricultural Lock-Out of 1874*, pp. 206, 216, 217, 225; O. C. d'Haussonville in the *Revue des deux mondes*, 15 Juin, 1881, p. 847.

cession to the workmen involves a series of others and inevitable outlay, that the general adoption of philanthropy would remove from any single philanthropist the gain of having steadier workmen than his competitors? The law therefore must supplement the deficiency of goodwill and adopt the general principle that every employer is responsible for the decent lodging of those he employs.* The mode of applying this principle and making the necessary exceptions is no insoluble problem. Here it is enough to notice a few points. The owners of any large bulk of immoveable property, and thus large landowners, large factory owners, mining and railway companies, might be made liable to heavy penalties if any one was employed on their property whom they could not shew was decently housed. For railways, which can only come into being by expropriation, it might be made compulsory actually to provide dwellings for the great bulk of their servants. All joint-stock companies, whatever their size or their business, and all large contractors, and many others might incur various degrees of liability. Nor let employers object the hardship of such a liability on a fluctuating business that requires at one time a multitude of hands at another time but a few; for this kind of business is a public injury unless in some connection with some second business which can employ the workpeople while the first business is slack; and the two can help each other in bearing the burden of providing dwellings for those they employ. Nor again let workpeople complain that the possession of houses by employers and the payment in kind would put the workmen much at their mercy; for the threat of eviction now sometimes used with effect (see Kebbel, *Agricult. Labourer*, 1870, p. 48) would lose half its terrors if there were plenty of other dwellings to be got; the present relations of employers and employed are not to be taken as tolerable or permanent; arbitrary evictions from dwellings can be checked by law; and the arbitrary raising of rent is no more an inevitable and irresistible evil than the arbitrary lowering of wages.

§ 198. Fourthly: Supply or improvement of dwellings by

* This is no new or revolutionary proposal. See Hole, *l. c.* p. 7; Engel, *l. c.* p. 58; cf. also Schäffle, *l. c.* pp. 552, 553.

charitable persons, whether in associations or separately, whether doing the whole work or co-operating with building societies, whether receiving some small return for their outlay or none at all. An immense field is open for the action of Christian charity, endless good works possible; whereas of building societies it can I think be said that they have occupied their field, can hardly do more than they do now, and have only to continue in their present condition, a great benefit to a large section of the people, but not able to pull the poorer sections out of the mire. Naturally if the other reforms we are considering were adopted, the field both for charity by the upper classes and associations among the lower classes would be much diminished.

If asked the character of dwellings to be provided by Government and local authorities, by landowners and employers, by associations and charitable bodies, I answer in general that reasonable healthfulness, convenience, and capacity for decent family life are essential requisites; and that a certain outlay on adornment is to be wished. These ends may be attained in houses of very different construction, arrangement, and appearance according to different circumstances, the country and climate, the customs of private life, the conditions of work, and much else, on which already something has been said (*sup.* § 183-185). Enough that for the special circumstances of England every family dwelling should contain at least three rooms that can be used as separate sleeping rooms, one for the parents and very young children, the others respectively for the elder boys and elder girls; that separate isolated cottages are better than groups; that groups even long rows of cottages, are better than flats; that where, as in the centre of great towns, flats are the only mode of construction possible at a reasonable outlay, each floor should be provided with all the necessary conveniences of a house, and each set of apartments be given the maximum of privacy.*

* The objection that giving a third bedroom only encourages taking in lodgers and injures rather than benefits family life, has some force against giving too roomy a house in the present miserable conditions of life; but if the reforms we are demanding were carried out, there would be no longer the keen demand for lodgings and the great temptation to take in lodgers, a practice very difficult for landlords to prevent however

§ 199. Fifthly: Various legal reforms. In England, to meet the evils of the leasehold tenure described above (§ 187), it has been suggested (in the *Quarterly Review*, April, 1872, p. 329) that in urban districts leaseholds should be enfranchised and the freeholder compelled to receive the value of the existing leases; that the civic, ecclesiastical, or charitable corporations, who own so much of the land of London, should be enabled or compelled to sell each ground-rent separately with preference to the leaseholder, and invest the proceeds in Government securities, saving themselves future trouble, and increasing their corporate incomes; that the tenure of houses being purged, the titles should be certified and registered, so that a transfer might be prompt and cheap; that the happy result would be a great national class of urban freeholders. Mr. Hole marks how the heavy law charges that prevail are a serious obstacle to a working man's acquiring a house (*Homes of the Working Classes*, p. 91), urges that the cost and complications of transferring

much they may forbid it. (Cf. Kebbel, *Agric. Labourer*, p. 53; Clifford, *Agricult. Lock-Out*, p. 226.)—Many designs for dwellings are given by Mr. Hole and Mr. Roberts. An interesting letter in *The Spectator*, 18 Oct. 1879, described Mr. Ellis's cottages at Seacombe for the working classes of Liverpool and Birkenhead, in detached groups each in the shape of an hexagon and containing six dwellings. For the happier districts where no pressing need bids us crowd the maximum of habitations upon the minimum of land, some admirable designs are to be found in Mr. R. Norman Shaw's *Sketches for Cottages*, London: W. H. Lascelles, 1878. He carefully attends (as a reviewer in *The Academy*, 12 Oct. 1878, observes) to two points essential to a comfortable cottage and yet very often neglected: one to mass the fireplaces and flues in one group in the centre of the building for warmth's sake and to prevent smoky chimneys; the other to avoid, whenever rooms are planned in the roof, covering it with common slate, lest the rooms be ovens in summer, ice-houses in winter. Moreover he seems to have got to the combination of beauty with cheapness and comfort. For the poorest class of family Design No. 4 seems admirably suited, and the rooms being all on one floor is a great convenience in such a family for attending to the sick and to children. Nos. 8 and 9 are single cottages of a more costly kind. No. 5 is a double cottage well arranged to secure the privacy of the two families inhabiting it, and an admirable model. The double cottages, Nos. 6 and 7, would be very suitable where married children continue to live with their parents.

land and houses should be lessened, that the owners of land tied up by any legal disability should have power to dispose of it whenever required by the local authorities, that the borough franchise should be given to every working man who was the owner of a house of a certain value (*Ibid.* pp. 107, 108, 112).

I will not quarrel with these proposals ; indeed, while the mass of householders are not house-owners, a cheap and easy mode of selling small houses and small plots of land is likely to be a great benefit ; nor have the corporations which hold so much of the soil of London given many tokens of being fit to play the great part in helping the poorer classes of society, which communal and ecclesiastical property certainly can play. But remember, our aim is not simply that the bulk of the working classes may gain possession, but may keep it ; and if there is no restriction to their borrowing on their houses, and if they can sell them as easily as a bale of cotton or Government bonds, the first period of trouble may see most of them pass back into the hands of mortgagees or speculators. To forbid any one to own more than two or three dwellings, would be a violent and revolutionary remedy, and, by cutting at the root of all care by the rich for the poor, would be worse than the disease. Far better would be laws exempting all necessities of life, the house among them, as well as the instruments of trade or agriculture from seizure for any sort of debt ; but such laws would I apprehend be the death of all building societies and thus at present would be a great barrier in the way of workmen getting the ownership of houses. A simpler reform would favour, not oppose, the acquisition of house property by joint-stock companies and by civil and, notably, religious corporations, and at the same time would give every possible facility and encouragement to the formation of a class of hereditary tenants, each holding his house for a fixed low rent, unable to borrow on it, or sell it, or let it, only to bequeath it to one of his children or near relatives, liable to certain restrictions in his use of the house, but not liable ever to be evicted except for grave and specified misconduct ; secure moreover against any creditors or legal suc-

cessors of the landlord, who would only stand to him as the landlord had stood. Further details and further defence of this emphyteutic tenure can be reserved till when we consider in the next Book its application to land-ownership. Here it is enough to answer those who might object to such a tying down of a family to one spot, that a frequent change of residence among the working classes is called for by the demands of trade and manufacture, the efforts to better their condition, the search for new fields of employment, and that therefore they ought to be able not only easily to acquire but easily to dispose of their property (Thomas Hare cited by Mr. Hole, *l. c.* p. 90). I answer, if the bulk of the workmen are to be for ever moving, they may as well be lessees as freeholders in each temporary camping place; and the law may stay as it is. It is no use, I well know, to tie people to where there is no work; but the tenure I propose is for the permanent workers in each locality, and all the rising generation except the representative of each house, can migrate if needs be, elsewhere. Finally, if some great calamity comes and trade quite deserts a town, and there is no longer work for even the old established families, the hereditary tenants who find they must go and have to abandon the house they have no legal power to sell, are little worse off than the freeholders who have equally to go, and who in spite of their legal power to sell their house, cannot, as the town is being deserted, get any one to buy it.

Sixthly: Measures to check the undue flocking of country people into towns. On these, such as political decentralization, agrarian laws, and moral police, I have already spoken enough (§ 134), and need only add that since the undue growth of towns is one of the chief causes of the deficiency of dwellings (§ 193), one of the chief antidotes is the repression of that growth.

I have now imperfectly and in outline set forth certain measures aimed at removing a crying evil and intolerable abuses. Legislation it is true cannot get much beyond the bricks and mortar, the cistern and the drains; and by itself, though it can do very much for the house, can do very little for the home. What it can do however is to set free the

good moral forces of society and chain up the bad. And by removing the deficiency of dwellings for the poor it will remove one of the greatest obstacles to the restoration of their faith and morals, their filial piety, family affection, domestic peace.

CHAPTER IX.

FURNITURE, FUEL AND CLOTHING.

Use of Furniture: Contrast of East and West, of Rich and Poor, § 200—Failings and Follies regarding Furniture, § 201, 202—Fuel: Use and Waste, § 203—Provision of Fuel for the Poor, § 204—Artificial Light, § 205—The Proper Use of Dress, with Examples, § 206—Examples of Abuses and Follies, § 207—General Historical Progression of Costume, § 208—Permanence or Change of Fashion. Uniformity or Distinctions in Dress, § 209—Calculations on the Cost of Clothing, § 210—Reasons for doubting a great Diminution of Cost in recent Times, § 211, 212—Excess and Defect in the Stock of Clothing, § 213—Baths and Washing, Past and Present, among Rich and Poor, § 214–216.

§ 200. Let us turn from the house to the moveable goods and chattels within it and connected with it. These may roughly be divided into furniture proper, domestic utensils, and thirdly, bedding and house linen. In the quality and quantity used we find great diversity. "In Eastern Europe," says Le Play (*Ouvriers Européens*, 2nd ed. I. p. 330), "a family is contented with a few wooden or metal utensils. All the bedding is composed of cushions and mats simply laid on the ground. There is therefore little expense either in acquiring or keeping up the stock of furniture. In the West, on the other hand, the poorest workmen consider as objects of primary necessity bedsteads and bed coverings, utensils of earthenware, china and glass, as well as of metal, and finally several pieces of furniture made of polished wood. And thus the purchase of a stock of furniture requires relatively a considerable outlay on the part of young people setting up house." To illustrate in figures the expense of bedding and house linen, domestic utensils and furniture, a recent interesting and trustworthy calculation, the details of which I give in a note, requires as the lowest outlay in North

Germany for the humblest household 280 Marks (£14), and as the desirable outlay 780 Marks (£39).* Among the rich

* The following table of what is requisite and what is desirable for a proper household, not reckoning personal linen and clothes, is given in an admirable little household manual for workmen's wives *Das häusliche Glück*, M. Gladbach, 1881, p. 27 :—

A. Absolutely necessary even for those with the smallest means.

I. Furniture (*Möbel*).

Marks Pf.

1. A table for the living room . . . 10
2. A small table . . . 6
3. Four chairs . . . 6'80
4. A bedstead . . . 19
5. A chest of drawers . . . 24
6. A kitchen cupboard (*Küchenschrank*) . . . 12
7. A stove with two openings . . . 36
8. A cauldron-stand (*Kesselbank*) . . . 2'50
9. A shelf against the wall . . . 2
10. A shelf for clothes . . . 2'20

II. Kitchen Utensils.

1. A coal-scuttle and scoop . . . 3
2. Two stove-rings (*Ofenringe*) and a poker . . . 2'20
3. A cauldron (*Wasserkessel*) . . . 7
4. Two iron pots . . . 3'40
5. A frying-pan (*Küchenpfanne*) . . . 2
6. Two earthenware cooking pots . . . 0'80
7. Four stone jars . . . 1
8. An earthenware strainer . . . 0'30
9. A stone pitcher . . . 2
10. Dishes and plates . . . 4
11. Knives, forks, and spoons . . . 4
12. Kaffeekanne, cups, glasses . . . 5
13. A coffee mill . . . 2'50
14. A petroleum lamp . . . 2'50

B. Desirable, in addition to what is put down in the previous column.

I. Furniture (*Möbel*).

Marks Pf.

1. A sofa . . . 45
2. Four better chairs . . . 24
3. A cupboard with glass doors . . . 30
4. A wardrobe . . . 36
5. A wash-hand stand . . . 10
6. A night stool . . . 8
7. A looking-glass . . . 6
8. A hanging clock . . . 10
9. A [moveable] cooking stove (*Küchenheerd*) . . . 45
10. A kitchen side-table (*Anricht*) . . . 18

II. Kitchen Utensils.

1. A soup cauldron . . . 4'10
2. A pan for baking meat (*Bratkessel*) . . . 1'50
3. A coffee roaster . . . 3
4. A wire sieve . . . 3
5. A potato grater . . . 0'50
6. A spice box . . . 2
7. A mortar for salt . . . 1
8. A coffee set . . . 10
9. Dishes and plates . . . 20
10. Knives, forks, and spoons . . . 9
11. A knife basket . . . 1
12. A bedroom lamp (*Zimmerlampe*) . . . 3
13. Washing tubs (*Waschkumpen*), etc. . . 6
14. A tin pail . . . 3
15. Linen baskets . . . 8
16. Duster and dust pan . . . 1'50

there is a striking contrast between Europeans and Orientals. In India "up country you may pass through a whole palace and the only furniture in it will be rugs and pillows, and of course the cooking pots and pans and gold and silver vessels for eating and drinking, and the wardrobes and caskets and graven images of the gods. But you are simply entranced by the perfect proportion of the rooms, the polish of the ivory-white walls, the frescoes round the dado, and the beautiful shapes of the niches in the walls, and of the windows, and by the richness and vigour of the carved work of the doors and projecting beams and pillars of the verandah" (G. C. M. Birdwood, *Handbook to the British Indian Section, Paris Exh'ib.* 1878, pp. 76, 77). Whereas in Europe, especially in the North, no house whose owner makes any claim to be wealthy is without a great number of chairs, seats, and tables of various kinds, of curtains and carpets, of cupboards, bookshelves and cabinets, not to speak of bedroom furniture.

	Marks Pf.
15. Two buckets [for clean water] and two pails	7
16. Hair brooms, scrubbing brushes, hard brushes	4
17. Two [wooden] tubs for [pickled] vegetables.	4
18. An iron and iron-heater	8

III. Bedding and Linen.

1. A straw palliassc (<i>Stroh-sack</i>) and a flock under mattress	20
2. Feather pillows (<i>Kissen</i>) and bolster (<i>Pülven</i>)	15
3. A flock quilt (<i>Oberbett</i>)	15
4. Coverlets (<i>Bettdecken</i>)	10
5. Three pair of linen sheets	18
6. Three pair of pillow cases	8
7. Tablecloths and towels	6'80
8. Various smaller articles	4

Total . 280

	Marks Pf.
17. Various smaller articles	10

III. Bedding and Linen.

1. A spring mattress	27
2. A hair mattress	45
3. A feather quilt	24
4. Better coverlets	20
5. Six pair of linen sheets	36
6. Six table cloths	18
7. Twelve towels	7
8. Various smaller articles	4'40

Total . 500

The mark is worth about an English shilling, the Pfennig about half a farthing.

E E

Again the difference between rich and poor is perhaps in no matter so conspicuous as in their stock of furniture, no contrast more striking than to pass in London from the reception rooms of a wealthy merchant to the lodging of one of the poorest class with little other furniture than a heap of rags in one corner and a broken chair in the other. And finally, given the stock of moveables to be acquired, there is a great contrast in the necessary cost under different circumstances of acquiring them. In particular the abundance of wood may make the acquisition of a stock of furniture and domestic utensils easy. The task is perhaps easiest where that most useful plant the bamboo abounds (see A. R. Wallace, *Malay Archipelago*, 7th ed. pp. 78-80). But European forests can also in this way as in so many others befriend the household of the poor. Among the rural population of Roumania, according to an account in *The Times*, 22 Aug. 1876, "wood replaces almost entirely metals, earthenware and glass, in furniture, in dishes, and in domestic utensils; excepting articles of rude pottery, all household furniture, water vessels, tubs, pails, boxes, pitchforks, shovels, spindles, weaving looms, plates, cans, spoons, basins, etc., all are of wood in the house of the Roumanian peasant." And naturally turnery is one of the most important industries. We can judge from this example the great value of the old rights of common, in virtue of which the country people of feudal Europe could provide themselves not only with building materials and with fuel, but also with the material of most articles of furniture and kitchen utensils.

§ 201. A household may possess and enjoy the right quantity and quality of furniture, or may suffer from excess or defect, having too much or too little or the wrong sort. The rich are not likely to have too little, and I think no rich and cultivated class has been seen anywhere that did not spend much on moveable goods within their houses, whether on warm hangings and wooden furniture as in England or on plate as in India. From what has been said in a former chapter (Ch. VI.) on the enjoyment of wealth in general, it is plain that too much indeed may be spent on these goods, too many enjoyed, their character be that of luxuries; but also that they may be many and costly, and yet not luxuries

at all, but ornaments rightly used, promoting cultivated life and attachment to home (*cf. sup.* § 147). And most of these goods when solid and durable are for two reasons not likely to become the channels of persistent extravagance. First, because it is so easy to leave off further expenditure on them without attracting any notice (as Adam Smith observes, *Wealth of Nations*, Book II. ch. III. *ad fin.*) unlike retrenchment in regard to carriages and servants, feasts and hospitality. Secondly, because they serve as a reserve fund and as an investment for savings; and if we are told they yield no interest, we can answer they yield an equivalent, and the interest from them is to be reckoned at what would be paid annually for the use of them, less an allowance for their wearing out. If indeed furniture is neither beautiful nor convenient nor solid, it is likely enough to become a channel of extravagance. We have hit upon a common failing of all classes, except the lowest, in modern England, Germany, and France, and I think a notable and characteristic weakness of the modern *tiers état*, the trading and manufacturing middle class. As to the fact, let any one examine or recal the works of the carpenters, joiners and cabinet-makers, wood-carvers, gilders and upholsterers, potters, glassmakers, locksmiths and ironworkers in England during the first twenty or thirty years of the reign of Victoria, and he will see from the ugliness and vulgarity, or the unpractical inconvenience and perverse inutility, or the shewy flimsiness and weakness of the great bulk of them, or the combination of these bad qualities, how unfit they were to form the goods and chattels of a reasonable being.* As to the lower middle classes,

* Many illustrations of what I have said are to be found in Mr. C. L. Eastlake's admirable volume, *Hints on Household Taste*, 4th ed. 1878, especially pp. 2-13, 55, 56, 66, 67, 95, 96, 138-141; for example, the absurd fashion of the last generation to make all furniture run into curves, 'shaping' as it was called, resulting in maximum ugliness, minimum comfort, and extra expense into the bargain. See also the interesting account in Mr. Bevan's series of *British Manufacturing Industries of Furniture and Woodwork*, by J. H. Pollen, 1877. He cites (p. 205) the Report on the English Furniture at the Exhibition of 1851: "The laws of ornament were as completely set aside as those of use and convenience. Many of these works, instead of being useful, would require a rail to keep off the household." Yet such is the tyranny of precon-

what Englishman who has any acquaintance with his countrymen but knows too well of "the cumbersome profusion of bad furniture and trashy vanities that go to form that dreadful institution the 'best front parlour'" (*Quarterly Review*, April, 1872, Vol. 132, p. 327)? And the spread of instable furniture, of shew instead of solidity, is lamented in Germany and France.

§ 202. The cause is partly in the altered conditions of those who prepare the furniture, among whom apprenticeship has been disorganized and machinery has lessened the need for accuracy and the motive for attention,* but mainly in those who enjoy the furniture and who are unwilling to pay the price needed for well-made goods, besides being eager for what is fashionable and what is new, be it never so ugly or inconvenient. And again these dispositions are due partly to the habit or necessity of frequently changing one's dwelling-place, whence tenants are driven (as Engel observes) to adopt cheap furniture which they can sell to-morrow with the same indifference they bought it with to-day, and at the same time to conceal the bad quality by external shew: but mainly due to the diseased condition of the middle ranks of society in these countries, prating about equality, grasping at superiority, envying those above them, despising those below them, living each grade in a sort of perpetual shame that it is not a grade higher, truly vulgar, and thus apeing the furniture as well as the dress of those above them.† Hence we

ceived ideas and the dulness of inartistic vision, that Professor Roscher the economical luminary of Germany could hold up England at this very period, and its middle class, as aiming at genuine, healthy, and tasteful enjoyment of life, at comfort rather than at uncomfortable display. *Nationalökonomie*, § 228, 10th ed. The whole section is saturated with errors and misrepresentation.

* See J. H. Pollen, *Furniture and Woodwork*, pp. 178, 179, 208. He notices the admirable workmanship bestowed by the ancient Egyptian carpenters on their chairs (*Ibid.* p. 168.) See also C. L. Eastlake, *Hints on Household Taste*, 4th ed. 1878, pp. 4, 66, 67, 138 *seq.*, on the former excellence of the work of English artisans in brass, wood and iron.

† In regard to Germany, Engel, *Die moderne Wohnungsnoth*, p. 8, after noticing the ill-effects on furniture of frequent change of dwelling, says that goods that are high-priced because solid do not please customers and remain unsold. "So have arisen in the great towns the many shops with elegant articles of furniture and brilliant stuffs having

see not only what is ugly, repulsive, ridiculous, but also excess in quantity—too much spent on furniture—by the middle classes, especially by the lower grades among them, sometimes stinting themselves in goods needful for a healthy and rational life in order to make a shew of these miserable superfluities. The other extreme is chiefly fallen into by the lower classes among whom we look in vain for the custom seen in other countries and in old times of a certain stock of furniture and household utensils besides clothes being accumulated before marriage, the amount a matter of local custom, the practice a salutary spur to youthful industry and sobriety, its absence likely to favour premature or rather reckless marriages against the wishes of parents, and leading in a few years to privation and degradation.

The goods and chattels primarily connected not with the enjoyment of the house but with recreation, such as pictures and statues, the bagatelle board or billiard table, will be considered under the head of recreations and their expense. At present we have to consider the enjoyment and the expense of fire and light.

§ 203. The varieties of fuel may be divided into four classes, first wood, whether in the shape of logs or charcoal, secondly peat or turf, thirdly coal, whether lignite (brown coal) bituminous coal, or anthracite, lastly, in the absence of any of the preceding, a miscellaneous class of mater-

rarely any claim to solidity and real value." In regard to France let us hear in his own words the incidental testimony of Lacordaire, given in his life by Chocarne, II. p. 327 : "Autrefois un même mobilier servait à plusieurs générations ; les meubles se gardaient comme les traditions, et le fils s'honorait de pouvoir dire : 'Voici le fauteuil où s'asseyait mon père !' Aujourd'hui, le moindre bourgeois change de mobilier trois fois dans sa vie ; mais en retour, sa demeure est étroite, tout y manque d'air, d'ampleur et souvent de bon goût. On surcharge les meubles de frivolités achetées très-cher, et dont personne ne peut dire à quoi elles servent, ni ceux qui les achètent, ni ceux qui les vendent, ni ceux qui les admirent." Of course opinions differ on what is good taste. While still shuddering at Professor Roscher's remarks on 'aesthetic popular culture,' it is consoling to be assured by a real authority that a man may possess vast learning, statesmanship, or professional knowledge, and yet be no judge of what is good or bad in art, of beautiful or ugly handiworks, even though he know something of their history. (J. H. Pollen, *Furniture and Woodwork*, p. 216.)

ials as dried grass, reeds, straw and the dried dung of animals in the treeless steppes and mountains, plains and prairies of the old world and the new (Roscher, *Ackerbau*, § 185, note 2). We must add gas and petroleum, though their chief use is not for warming but illuminating. In judging of the different kinds we must distinguish between the use of fuel as a motive power or in manufacturing processes and its use at home in cooking and warming. In the former use coal has a vast advantage over its rivals;* England must be an entire forest if it is to get every year from its woods the same heat it gets from its coal mines. But then coal mines come to an end, whereas a forest and even a peat bed grow again and if worked in compartments can last indefinitely. And further in domestic use coal is a nasty substitute for wood, and there are many kinds of food which are better when prepared at a fire of wood or peat. Where coal is used and contrivances for consuming smoke are not general, there is a great gain in the coal being anthracite, which is smokeless. And thus the cities near the great anthracite beds of Pennsylvania are bright and clean in contrast to the gloomy and dirty cities where, as in England, bituminous coal is the common fuel.

The amount of fuel needed within the dwelling house depends on many other circumstances besides the coldness of the climate. Northern regions indeed are doubly necessitous, as a less proportion of food can be taken there uncooked. But also more fuel is needed where thin clothing is habitual as among the richer Europeans whose evening dress presupposes warm rooms; whereas in Chinese houses the absence of fireplace is met by wearing additional clothing, or by burning charcoal in braziers. And much more fuel must be used to warm one house than another according to differences in the thickness and materials of the walls and roof, the construction and arrangement of fireplaces, stoves, and flues, the size and fittings of the windows. Thus for every 5 tons of fuel needed to warm a house with walls 2 feet thick, it has been reckoned 12 tons

* But there seems a possible great future in store for peat. See the interesting pages on peat in Mr. P. L. Simmonds' *Waste Products*, 1876, pp. 296-314.

would be wanted if the walls were only one foot thick (see Roscher, *Ackerbau*, 7th ed. § 185 note 4). The badly constructed open fireplaces of England have for many years past been wasting annually hundreds of thousands of tons of coal, and covering our towns with a black pall of soot. The same mischievous wastefulness has been repeated in most manufactories, and the tall chimneys vomiting forth black smoke disfigure in defiance of law the face of our country—no wonder, when the execution of the law is under the control of the very persons it is supposed to keep in check.* The danger of the exhaustion of our coal is sufficiently grave (*sup.* § 83) to justify measures against wasting it; and the damage done to property by smoke (noticed *sup.* § 81) is sufficiently grave to justify the enforced use in every thickly peopled district of smoke-consuming furnaces and fireplaces. And besides the direct injury to property there is an indirect and far worse injury to the person; health indeed may not suffer, but home life among the poor is injured by the difficulty of keeping a clean and tidy house. Apart from the construction of the fireplaces or nature of the fuel, there is also an art of managing fires, saving fuel and suiting the degree of heat to the varying requirements of the household, an art that must be learnt and in which different housewives are very unequally skilled. Naturally also by making one fire serve to warm many persons and especially to cook for many persons, much fuel can be saved; and thus where fuel is very scarce the concentration of certain cooking operations, as when a village oven serves in common for all the villagers, may be beneficial.

§ 204. But whatever the kind of fuel, an uniform and it possible an abundant supply is a great boon to the poorer classes in any country with a wintry season. This was secured to the country people in the ancient constitutions of Europe in the shape of rights of common of villagers or

* On the horrible effects of the smoke in parts of Lancashire and Yorkshire see a letter dated 17 Oct. 1881, in *The Times*, by Mr. William Bousfield, who ends by saying, "I have frequently been told that the real obstacle to the enforcement of the law for the due consumption of smoke is that its action is controlled by those from whose pockets the cost of improvement would come. If this is so, their responsibility is heavy indeed."

vassals, enabling them to cut firewood or dig peat in the woods or wastes held by the commune or by the lord ; and in some fortunate districts these rights of common still survive. We should seek to preserve or restore them and to regulate their use so as to prevent them conflicting with careful husbandry and forestry. For such regulation is quite possible. But these matters and their history must be considered when in the next book we treat of the rights of common in each agrarian constitution. Modern landowners and employers in some cases still follow the example of feudal lords in providing their dependents with fuel. In coal districts a certain amount of coal is often delivered to the workman as part of his remuneration, and in the rural districts of England the poor labourers sometimes receive in the shape of grants of firewood or the permission to gather dead wood, substantial help. In parts of Ireland where peat is the only fuel, and there are no fit means of drying it in a very wet season, there is risk of great periodical suffering.

In large towns where fuel has to be bought, the poorer classes are liable to great hardships from exorbitant and fluctuating prices. Thus each winter in London and Paris brings keen suffering to many who cannot afford the amount of fuel which, from the character of their houses and clothes, is necessary to keep them warm. They can be partly protected by a reform in the character of retail dealing. But the peculiarities of the supply of fuel require more than this ; and a good government has the triple duty of securing first equitable prices in the wholesale market, and then steady prices, and thirdly of preventing the shortsighted and reckless exhaustion of forests and coal mines. The means to reach these ends may vary with circumstances ; one of the simplest is the ownership of mines and forests and of vast stores of fuel by corporations, lay and religious, and by the State ; but if not this, some means certainly are called for to check gambling and speculation, 'rings' and 'corners,' in a necessary of life ; and the so-called coal famine in London in 1873 when the price during the year was more than sixty per cent. above the average* must be looked on as a national disgrace.

* According to a return given in *The Times*, 13 June, 1881, the aver-

§ 205. The use of artificial light is very small among much of the rural population of Europe, but considerable in high latitudes during the dark period of the year, and in towns and in the houses of the richer classes. The expenditure may not be in proportion to the use, and may not be easy to calculate, especially where, as in the use of gas for many years past, allowance has to be made for dirt and damage. And besides mere pleasantness and convenience, the effects on health and eyesight must be taken into the reckoning. Europe of old was lit, perhaps we may say, by five chief luminaries, the flame from fish-oil in the extreme north, from olive-oil in the southern regions, from wood steeped in pitch where forests abounded, from tallow in most parts, and lastly from wax. But just as honey has yielded to sugar, so wax candles in many parts have been supplanted in ordinary use by candles prepared in new and skilful methods from fatty substances of plants and animals, some got at home, much brought from the arctic regions and the tropics. Besides this revolution in light our century has witnessed two others; and we seem in midst of a fourth. One of them, beginning about the year 1810, was the introduction of gas, on which, as marring so many beautiful landscapes, and destroying so many works of art, and injuring so many household goods, and glaring in so many gambling hells and drink-shops, I cannot speak with impartiality, and must leave others to strike the balance of loss and gain. The third revolution was the introduction of petroleum, which I think has been a true friend to the humbler classes and has become in Western Europe their almost exclusive material of illumination. Lastly the electric light seems now on the eve of overthrowing the dominion of gas.

A word should be added lest we be dazzled into blindness. It is indeed a good thing for a bright and steady, clean

age price, excluding City or other dues, of the best coals at the ship's side in the port of London was :

During the ten years 1863-1872 about . . .	18s. 10d. per chaldron.
During 1873	31s. 3d. per chaldron.
During the seven years 1874-1880.	18s. 8d. per chaldron.

The prices from 1870 to 1880 were respectively : 17/5, 18/2, 23 10, 31/3, 24/8, 22/9, 20/2, 18/5, 16/10, 16/11, 14/11.

and wholesome artificial light to be obtainable at little cost. It is a blessing for those who have to do manual work or to study after dark. It makes society more pleasant and helps to dispel mental as well as physical gloom. It gives no little aid to the police in preventing theft and violence. It is perhaps a promoter of intellectual pursuits. But it may bring mischief in its train. Where night is turned into day there is an increase of opportunity for oppression and dissipation. Millions may now wearily toil when else they would have been at rest ; thousands may now distort the hours of sleeping and waking and make sunset the middle of their day ; the gulf between the habits of different classes may become greater ; the brilliantly lit streets of the city may draw the young by an almost irresistible attraction from the darkness of the country village and the stillness of the parents' home, and the more their simplicity and modesty, their habits of frugality and obedience, their dutifulness and affection are scorched by the flame of urban licentiousness, the more, like moths around a candle, they strive to be consumed. And an optimist who scorns his forefathers and who thinks that a great consumption of gas and other lighting materials shews mental illumination, and a cultivated people, and studious habits, and a happy social life, might with profit take a survey of the well lit streets and shops of the plebeian quarters of London some Saturday at midnight ; and perhaps, having seen both those who were taking their pleasure and those who were earning their living in this brilliant light, he might come to think that the curfew, if indeed he could recollect so barbarous an institution, was not altogether an unmixed evil or oppression.

§ 206. Let us now consider dress and personal adornment, a matter which I may not pass over in silence, and yet which I cannot treat as it deserves. For the history of dress with its wonderful variations is full of interest and significance, and is not to be neglected by any trustworthy historian. Nevertheless in economical science the details of this history do not require examination because in the main the different kinds and articles of dress are not a cause but an effect of the social position of the wearers. Some general principles and their illustrations from history are therefore

sufficient ; and the remarks that follow are a rude attempt to supply them.

The two primary ends of dress taken as a whole are to cover the body decently, and to protect it whether against cold, or wet, or the sun's rays, or wounds from sharp stones, or noxious plants and animals. And further, dress should not hinder but rather help a man to fulfil his ordinary occupations ; and should not disfigure but rather adorn the body it covers. Finally dress has served usefully to distinguish different classes of persons, men from women, clergy from laity, soldiers from civilians, one trade from another, one man's servants from another's, one rank in society or in office from another.

Many examples can be given of entire costumes or of single articles of dress which have admirably fulfilled their purpose. The modest and becoming dress of the women of all classes in China was noticed years ago by Davis (*The Chinese*, I. p. 336, edit. of 1840), and for men in a tropical climate there is nothing better; according to Mr. Wallace (*Malay Archipelago*, p. 27, 7th ed.), than the Chinese national dress of loosely hanging trousers and a neat white garment half shirt half jacket. He also praises the simple and elegant costume of the Dyaks of Borneo, the *charwat* or waist-cloth of cotton in three colours, and for those who are rich enough, a handkerchief on the head (*Ibid.* p. 66). The costume of the farmers of the Lebanon is admirable and picturesque : loose blue pantaloons tucked into huge knee-boots of tanned leather (a defence against snakes), and a variegated waistcoat with or without a shirt beneath, and over all the black-striped *abbas* or heavy blanket-cloak, an equal protection against heat and cold ; the head covered with the *kefia* or square scarf of silk or cotton, bound over the forehead by a double coil of thick black woollen rope, and round the waist a many-coloured belt (*Saturday Review*, 10 Sept. 1881). The ancient Malay dress is still in use unaltered among the women of the Philippines, who are wrapped in the many-coloured folds of the sarong, and their hair flows down their back from under a white kerchief on their head (W. G. Palgrave in *The Cornhill Magazine*, Aug. 1878, p. 158). The flowing and embroidered garments and

beautiful head-dress of the Anglo-Saxon women, and the male dress, of which the leading feature was a linen or woollen tunic, appear to have combined beauty, dignity and convenience. High praise has been given to the dress of the Germans in the time of the Hohenstaufen.* And in the first half of the present century among the peasantry of many parts of Europe excellent costumes were to be found mostly home-made and combining comfort, durability and beauty. Of single garments we may notice the Portuguese palhoças or rush-made waterproof cloaks, costing less than a shilling, and much used by all conditions of persons in the province of Minho, enabling field work to be done on the rainiest days (Latouche, *Portugal*, pp. 133, 134). The mediaeval chape de pluie was a large cape with sleeves and completely waterproof, used by both rich and poor (Paul Lacroix, *Manners and Dress during the Middle Ages*, English ed. 1874, p. 535), and might well make our husbandmen, when their clothes are wet through, grow envious at the thought of it. In Corea they wear excellent split bamboo black lacquered hats, a protection against sun and rain, and the country people are shod with useful straw-plaited sandals having hempen strings between the toes and easy to walk in (E. Oppert, *A Forbidden Land*, Lond. 1880, p. 123 seq).

§ 207. Of failings in dress, of garments immodest, unhealthy, cumbersome, unprotecting, unsightly, many are the examples. On immodesty a few words of caution are needed against rash judgments and false conclusions. For if we

* On the Anglo-Saxon costume see *The Pictorial History of England*, I. pp. 327-331; also J. R. Planché, *A Cyclopædia of Costume*, 1879, vol. II. pp. 33, 34, 36. The mediaeval costume before its degeneration is much praised in the large quarto on *Die Trachten der Völker* by Albert Kretschmer and Carl Rohrbach, Leipzig, 1864. I can here give a general reference to Planché and Kretschmer for some of the facts and criticisms that follow. Mr. Eastlake in the introduction and ninth chapter of the work already cited (*Hints on Household Taste*) has many valuable remarks on dress and personal adornment. Discriminating readers can also gather much that is sound and sensible from Mrs. H. R. Haweis' books *The Art of Beauty*, 1878, and *The Art of Dress*, 1879. If indeed she knew a little more about the classical (post-Homeric) Greeks, she would perhaps admire them less.

put aside degraded savages, we shall still find among the rest of mankind a great diversity within certain limits of their view of what modesty requires; and though two peoples had both the same views and habits of morality, the same costume might be held, and might be, unseemly among the one that was used without offence by the other. The habitual exposure of much of the person in some climates and among some races is no indication of moral depravity; nor on the other hand can we infer because every part of the body is closely veiled, that modesty prevails among the wearers. Leaving this matter let us consider some of the garments that afflict or hamper the body or fail to give it due protection. The deformed feet of the Chinese ladies shew merely an exaggeration of a common practice in this century and the last among the Europeans, who besides cramping their feet add to the difficulties of locomotion (not to speak of the possible injury to the spine) by propping up their heels.* The gentlemen of France in the 14th and 15th centuries seemed afflicted with an incurable hankering after long-pointed shoes more cumbersome but probably far more comfortable than the tight and shining patent leather boots of the modern Continental dandy. And the head has not been treated more reasonably than the feet. Leaving older times and the horned ladies of the 15th century, and the ruffs of the 16th, let us only recal the last two centuries and the vast structures that rose on heads of fine ladies in the period of Louis XV., structures sometimes over two feet high and so elaborate that often weeks elapsed before they were taken down; and thus they had to be encased when the wearer slept. And gentlemen having for some hundred years put wigs on their heads had scarce shaken them off when they put on the new burden of the tall cylinder hat, and soon stifled themselves with the stiff collars known as stocks, which borrowed the inconvenience without the beauty of the ruff. After somewhat more than a quarter of a century our fathers were delivered from the stocks but not

* For a description of both the Chinese and the European compression of the feet with illustrations see the interesting little book by Mr. W. H. Flower entitled *Fashion in Deformity*, London, 1881, pp. 58-78.

from the cylinder hat, which seems likely to equal the wig in the length of its reign. As to the main body of the dress let it suffice to notice two notable failings, one of extension the other of compression. Thrice in the course of history the ladies of this realm have extended their dress on hoops regardless of the danger from fire, the ludicrous appearance, and the continual inconvenience; so the fashion of the farthingale under Elizabeth, the hoop under George II., and the crinoline which prevailed for more than a decade under Victoria. More mischievous and lasting and ten times worse than the compression of the feet by the Chinese is the compression of the waist known as tight-lacing, deranging the internal organs, inflicting torment, injuring health, making childbirth more dangerous, and often avenging the perverse striving after beauty by disfiguring the countenance. And let no one think that only the richer classes are the slaves to fashion and vanity, witness the abandonment of many useful and suitable forms of dress by country people in order to be like the town people, and by those who have to do rough and manual work in order to be like those who work more with the head than with the hands. Wooden shoes have yielded to leather; and yet it is healthy to wear them, they keep warm, and the feet can perspire in them better than in leathern shoes (*Das häusliche Glück*, p. 155, *cf. sup.* § 140). Only remember a large part of the unhealthy clothing of the poorer classes is due not to fashion or vanity, but to the attraction or necessity of cheap and flimsy goods, ready-made and ill-fitting, adulterated, hard to clean (as mixtures of cotton and wool), heavy without warmth, and with other defects (*cf. sup.* § 115).*

We have yet to illustrate ugliness in dress. Unsightly garments have been worn before our age, but I know not whether at any previous period in the world's history the

* Mr. Flower, *Fashion in Deformity*, p. 71, says: "The labouring men of this country, who from their childhood wear heavy, stiff and badly-shaped boots, and in whom, consequently, the play of the ankle, feet, and toes is lost, have generally small and shapeless legs and wasted calves, and walk as if on stilts, with a swinging motion from the hips." And he notices (pp. 71, 72) the hardship on the majority of poorer people, who are obliged to wear ready-made shoes of the form that an inexorable custom has prescribed.

whole population of a great country like England and the whole upper class of two Continents have been so clad that every artist has to turn from them in despair. The injury to sculptors and painters from the world they live in being unfit for representation has been noticed and lamented (C. L. Eastlake, *Hints on Household Taste*, pp. 6, 7, 258, 259). And those who would understand the dignity of man and the blessings of liberty should study the aspect of a London crowd, whether in the sordid and shapeless garments of every-day work or in Sunday finery with coats and hats and boots all shiny and black and, their fair companions in a tasteless caricature of some recent fashion among the rich.

§ 208. The causes at work in producing changes of costume are worthy of study; but I leave the matter to those better instructed, and will only notice a few historical points. The inclination to imitate foreign costume was seen in ancient as well as in modern times. The Egyptians dallied with foreign fashion; the Persians wore the Median dress and the Greeks learnt it from them. The poets of Greece levelled their sarcasms at those who aped the dress of Asiatics. The Greeks in their turn were imitated by the Romans. The national toga went out with the Republic; and like the uniformity of the modern dress of Europeans, a uniform dress formed of a mixture of the Greek and the Roman prevailed throughout the empire from the time of Augustus. After the empire had fallen in the West a period of struggle or assimilation set in between the Roman costume and those of the barbarians, till in the tenth century the long tunic of Rome and Byzantium externally gained the victory; but the under-garments of linen and the nether-garments of linen or leather were very different from the dress of antiquity. This early mediaeval dress, perhaps the best that Europe has ever seen, declined in various ways, the bad fashions being set by France from about 1350 to 1415 and by Burgundy from 1415 to 1480. The follies of women were mostly confined to their head-dress, while their graceful body-dress continued. But the men of fashion, besides elongating their shoes, encased their bodies in tight and gaudy and unseemly clothes. Towards the close of the fifteenth century the uniformity of the dress

of Western Europe seems to have suffered an interruption till the Spanish fashions came to prevail in the sixteenth century, a great improvement for men, but destroying the graceful mediaeval dress of women and introducing the hoop. A reaction overthrew the stiff garments of Spain and in the early part of the seventeenth century the dress of Europe as a whole was perhaps better than it had been since the thirteenth century. But then gradually the dominion of fashion was acquired by France and retained ever since. Immense flowing wigs were introduced for men that would have amazed the long-haired Merovingians; in the cities and courts of Europe the day of picturesque costume was over; and in spite of a few graceful intervals, witness the pictures of Watteau, among both sexes or one, we can still say that that day has not yet returned. One remarkable phenomenon remains to be noticed. In the period from the fifteenth to the eighteenth century the peasantry of many districts especially in Germany, Italy and France, instead of following the general fashion, stopped short one after another and the entire costumes or certain garments of different periods of the past were thus as it were crystallized and preserved in the various peasant costumes which were the delight of travellers thirty years ago. I will not attempt to discuss the causes of this crystallization; and these various costumes, which have been slowly declining for the last fifty years, seem doomed to disappearance, and to give place at least for a time to the reign of universal ugliness.

I do not see that we can draw much except negative conclusions from the history of costume. There seems no uniform progression or retrogression. Failings in head-dress or foot-gear do not imply corresponding failings in body-dress, nor extravagances on the part of one sex extravagances on the part of the other. We cannot say that a fashion will last a short time, or again, a long time because it is unsightly or inconvenient; nor a long time, or again, a short time because it is convenient and beautiful. We cannot be very elated when we remember we have never come up in matter of dress to the Anglo-Saxons. We need not despair when we remember how many follies have been reformed.

§ 209. Apart from the question of the goodness or badness of any costume or garment, there are two other more general questions ; first whether the forms of dress should be changeable or not, and secondly whether they should be uniform or various for different ranks, occupations and districts. As to changes I am not speaking of those occasioned from time to time by change of circumstances, as new habits of life, or materials of dress, or processes of manufacture, which may require dress to be in a new form ; but I am speaking of those due simply to the love of novelty and distinction. These changes may be of accidental service in removing ridiculous and mischievous costumes ; but in the main they seem in many ways injurious. What is beautiful and commodious becomes old-fashioned and is discarded ; a false standard of taste is set up, "seest thou not, what a deformed thief this fashion is?" the manufacture and use of durable garments that will last a lifetime are discouraged ; extravagance is fostered by the desire to be ever arrayed according to the latest fashion, and thus "the fashion wears out more apparel than the man ;" the poorer classes or the rural districts have to put up with clothes of a cut already antiquated in the fashionable world of the great towns, whereby these increase their power, supremacy and attractiveness ; there is a frequent loss of technical capacity, of instruments and materials of work through sudden changes of fashion ; and for the loss and impoverishment of one set of workpeople through these changes it is but a sorry compensation that another set are intoxicated by sudden enrichment ; nor when one family is out of work are we consoled because another is overworked. And as we bow under the humiliating tyranny of tailors and milliners, and allow shopmen to tell us what is fit for us to wear, we may well sigh for the happier condition of the Chinese who have not to submit to the dicta of ignorance and interest, but for whom the only setter of fashion is the board of rites and ceremonies at Peking (J. F. Davis, *The Chinese*, I. pp. 330, 331).

The question of uniformity of dress is not a simple one. Naturally there is no question of the need of some variety. The European black cloth coat is ridiculous in the tropics ; a cotton jacket would be ridiculous in the polar regions ; and

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the working dress of a fisherman, a coalminer, a ploughman, and a baker must for each be different. Women to secure respect should wear clothes plainly distinguishable from those of men; and the clergy at all times, soldiers and police when on duty, should wear a distinctive dress to be a witness of their claim to obedience. But ought there besides these necessary or obvious differences to be others according to a man's country, district, party, trade, or master? The question whether each independent nation should have its own costume I leave alone, and will only say a word on local costumes. It is a calamity that those of the European continent, most or all of them substantial and many of them beautiful, should be supplanted by what is ugly, flimsy and incommodious, and that local, domestic and rural industry should suffer injury. But such evils are not a necessary accompaniment of uniformity in national costume; and we should examine whether for example it would be a calamity for all the local costumes of France to be supplanted, not by the odious garments of Paris, but by the excellent costume of the Breton peasants. On this I will not give any opinion; but regarding another distinction, I think it a calamity for different parties within a State, as Puritans and Cavaliers, to be distinguishable by their dress, because this is likely to make discord more bitter and lasting. The distinction on the other hand of the dress, even the holiday dress, of different trades and callings is likely to make social discord less. If every honest calling is held honourable, a distinctive dress may help to preserve this healthy opinion. If all the dependents of a rich man wear some distinctive livery, he is more likely to feel and to practise towards them his duties of fatherly care; though indeed in some past conditions of society there may have been political danger from troops of liveried retainers. Finally, the more every other distinction is obliterated, the more conspicuous appears the one that yet remains of rich and poor. The wealthy and cultivated can wear clothes of the same general form and colour as the poorer members of the middle class and yet by certain subtleties of the tailor and dressmaker make themselves easily distinguishable. And the rude multitude with their clothes stained and dirty, faded and shrunk, patched and threadbare,

clumsy and ill-fitting, often the left-off clothes of their betters, are as distinct as when sumptuary laws bid them wear a special costume. Only then they had a recognized position, if a humble one. There was nothing undignified in wearing the livery of one's rank, or even, if the rank was low, of wearing that livery threadbare and soiled. The man of small means was no worse dressed than the nobleman, but differently; now he no longer dresses differently, but worse; and the pretentious garments show too plainly the lack of taste and culture and—most humiliating and inexcusable of deficiencies—the lack of a full purse.

§ 210. To reckon the cost of dress is often difficult. We have to consider not only the various processes of procuring the material and making them into clothes, but also the length of time the clothes last and the expense of cleaning and repairing them. And then it may make a great difference in the cost whether everything is done at home, or everything done outside the house and paid for in money, or partly the one partly the other. One extreme can be seen among the half pastoral people south of the Ural mountains whose clothes are all made at home from skins, wool, and hemp, the men tanning, the women spinning and weaving (Le Play, *Ouvriers Européens*, I. p. 341), or again among the Bulgarians described by Le Play (*Ibid.* II. ch. VI.) about the middle of this century, and some twenty years later by Mr. H. C. Barkley (*Between the Danube and the Black Sea*, preface), well clad in sheepskins, home-spun wool, linen from home-spun flax, and cowskin mocassins, with coverlids, woollen rugs and linen sheets in the sleeping rooms, all from their own animals or plants; and even making their own soap. The other extreme can be seen among the English factory population where all the clothes are bought and neither men nor women are able to make them, and all the women do is to patch and darn and do some part of the washing, sometimes not even this much. Between these extremes are various intermediate cases. There may be no spinning or weaving at home; but women by knitting and sewing may make at home into clothes the materials prepared in factories, or again may keep clean and in repair the clothes that have been bought in shops. This last is a

common arrangement in England ; whereas in ancient Rome, though many of the clothes were made at home, they were not washed at home, but sent to the fuller or washerman.* The less cost of clothing in warm and dry regions because less clothing is wanted there, is too obvious to need illustration. It is more necessary to notice the great variety in the durability of garments and in the expenses of washing. Thus in the middle of this century the low-priced cotton and woollen fabrics furnished by manufacturers for the workmen in the West of Europe rapidly wore out, whereas the garments of leather, sheepskin and fur, and of home-spun linen and woollen cloth worn in the East and the North, often lasted a lifetime. In regard to washing, as linen and cotton require more than wool, there must have been an increase in expense when under the Roman emperors, instead of the former prevalence of woollen garments the linen shirt, borrowed as well as its name (*camisia*) from the Northern nations, became common, and linen under-garments prevailed, as they continued to do for centuries in Christian Europe.† At the present day the working classes of Great Britain and France need to have their clothes washed much more than the peasantry of the East of Europe because they wear so much cotton instead of sheepskin, furs, leather and wool, and also because baths and bathing are so much less common among them than in the East (*cf.* Le Play, *l. c.* I. pp. 349, 350). In many towns and manufacturing districts there is a further reason from the filth due to unconsumed coal smoke (*sup.* § 203). The cost of washing moreover may vary not only with the amount to be done but with the facilities for doing it. In England when there was plenty of space

* Among the Hindus even those of the poorest circumstances and lowest caste will not do more than rinse their clothes when they bathe ; and a special caste of washermen (*Dhobî*) alone perform the process of washing, which is done with fuller's earth (M. A. Sherring, *Hindu tribes and castes*, 1872, p. 344).

† Many interesting remarks on the history of linen are given by Hehn, *Kulturpflanzen und Haustierte*, pp. 97-120. The use of linen rags for paper seems to have first been discovered by the Moors in Spain. And besides ministering to literature, flax has ministered to fine art still more by providing the painter with his canvas and his oil, and the maker of lace with her almost imperishable thread.

and plenty of running water unpolluted, washing could not have been so serious a matter as now when among the richer classes the expenditure on it sometimes absorbs the twentieth part of their income, though we must remember a large portion of this is not to be charged to clothing but to house and table linen. Among the working classes in large towns and manufacturing districts the facilities for washing are often very deficient, and they must either suffer the heavy expense of sending their clothes to a laundry, or else the misery of turning their living rooms into wash-houses and drying grounds. The need in England of providing the dwelling-places of the poorer classes with proper facilities for washing, or at least of setting up public wash-houses we have already seen (*sup.* §§ 183, 194, 196). But the latter alternative, taking women from their homes, and congregating them together promiscuously, although under the circumstances it may be a great benefit, shews that in these circumstances there is something amiss.*

§ 211. Technical progress has perhaps in nothing been more conspicuous than in the preparation of the materials of clothing. And yet we may reasonably doubt whether

* Cf. Le Play, *Ouvriers Europ.*, I. pp. 351, 352. He praises the plan much adopted at Geneva in the houses inhabited by several families of workmen or *petite bourgeoisie*. There is a washing room at the bottom of each house and a drying room at the top; and both are used in turn by each family of lodgers. In England, according to *Chambers' Encyclopaedia*, 1874, s. v. *Baths and Washhouses, public*, the chief use of the public washhouses has not been by the really poor families for whom they were intended, but by laundresses, boarding and lodging-house keepers and families in the middle ranks of life. A reason may be that the poor are ashamed to bring their scanty, coarse and much worn apparel to a place where it may meet the eye of others. Dr. Lyon Playfair, in *Lectures on the Results of the Great Exhibition of 1851*, I. pp. 170, 171, reckons the cost of washing to be about one-twelfth the income of a family of moderate means; that a dozen shirts bought for £3 12s., if they last three years and if three of them are washed a week, will cost in washing £7 16s. or nearly double their price; that the use of hard water for washing in London besides causing a greater wear and tear of clothes, causes a waste of soap and sodasalt equal to the gross water rental. And he urges the great importance of attending to homely industries. This is obvious from the calculations just given in this note, as well as from some of those in the following section (§ 211) notably the second on mending clothes.

after all in Western Europe the cost of clothing has really been lessened for the bulk of the people. This seeming paradox will be more intelligible if we consider the six points that follow. First, in comparing the cost of home-made clothes with bought clothes it is not enough to say for example that a woman or a girl working in a factory can earn in a week enough to buy clothes that she could not have made at home in a fortnight. Let us suppose this is true and that the clothes are as good : we have not yet shewn that they really cost her or her family less. For cost means personal sacrifice (*sup.* § 55) ; and we have yet to consider whether two or three hours of external and regular labour may not require as great a sacrifice as a whole day spent in the preparation of the garments of the household at home, where the work can be done to her liking, at her leisure, at her ease, and where, without seriously interrupting it, half a dozen other useful occupations can be done at the same time, as minding the children and the dinner, and the door and the fire, and the pigs and the poultry, learning (if a girl), teaching (if a mother), dusting, brushing, cleaning, washing, mending, plucking, pruning, and the rest. Unless therefore some other suitable occupation is found for women at home, the compensation may be very great that is needed to make up to a workman's family for the loss through removing the textile and the clothing industries from the house.

Secondly, the repair of garments and house linen may suffer by the absence of women from the house or their absorption in some other labour. The homely maxim, a stitch in time saves nine, is a truth of economical science. Timely and proper mending it has been reckoned will make most clothes last just double the time they would without it. Thus a splendid series of inventions which made all the processes of preparing clothes less costly by half, from the first ploughing the land for the cotton crop to the last process of hemming or sewing, would be entirely neutralized in their effect on the cost of clothes, if simultaneously a domestic revolution took the women from the house, and caused the humble offices of stitching, and darning and patching to be neglected.

Thirdly, much of what has been said on repairing may in a less degree be said I think of washing and cleaning ; and much damage be done and clothes worn out much quicker if a careless race of servants succeed to a careful race, or if washing be done away from home instead of under the eye of the housewife, or if most women be ignorant of the art of washing linen, or only know enough to wash it ill.

Fourthly, the cost of washing may be a great burden, independently of whether the clothes are washed badly or well ; and we have seen (§ 210) how the very populations who most use the cheap clothing from manufactories, suffer the most from want of facilities for washing ; and this want is a serious take off from that cheapness.

Fifthly, by the spread of buying and selling instead of making at home comes the danger of goods remaining unsold and being spoilt or depreciated ; and the danger of cheating and extortion. I am not speaking of bad and adulterated articles ; for, these will form the sixth point of our considerations ; but of simple false weight, short measure, and exorbitant prices, advantage being taken of the ignorance, or carelessness, or pride, or hurry, or poverty, or dependence, of the buyer. No doubt the loss to the seller when his stock remains unsold and has to be got rid of at a sacrifice, is partly balanced by the gain of the buyers. But much is really spoilt to no one's gain (*cf. sup.* § 104). No doubt also a great part of the loss of buyers who suffer fraud or extortion is pure gain to the seller, and the nation none the poorer. But the time and machinery used for cheating and the time and machinery used for checking it are a dead loss. The profits also of fraud and extortion may draw too many into a trade (*sup.* § 118) ; and if half a dozen shops would be sufficient, it is a grave loss to the nation for the business to be split up among half a hundred.

§ 212. Sixthly and lastly, an immense and incalculable loss comes from the bad quality of the materials and made-up goods that are bought ; and this evil, a characteristic of our age, is by itself perhaps sufficient to sweep away from vast multitudes the advantage of cheapness of clothing which else they might have got from the steam-engine and the spinning machine. The loss can be reckoned somewhat

as follows. First, the same labour and property now expended in making flimsy cloth and bad leather, if expended on solid goods would be more productive, for example might produce leather for 40 boots that would last a twelvemonth instead of for 50 boots that would last only four months, and thus more than double the former rate of production. Then again the quicker the materials wear out the more frequently the process of making up has to be repeated, the work for example of the tailor and dressmaker, the seamstress and bootmaker, may have to be done double as often, not to speak of repairs. And moreover the bad clothes are often inconvenient and unhealthy, and the delusive cheapness out-balanced even in money by the payments to the doctor and the apothecary (*cf. sup.* § 207).

It may be asked how comes it that men are so foolish, that such garments are made, that the show of cheapness is so often preferred to the reality.* And if we say that cheap and nasty clothing is made because it is in demand and is in demand because it is made, there yet remains the question how we have got into this melancholy circle. We have got into it because, our nature remaining the same, our institutions have been changed. In the old constitution of the clothing industries goods were either made at home and thus the temptation to make them showy and flimsy was avoided, or else by masters and workmen bound together in a corporation which so acted, that members had little to gain and much to lose by attempting to undersell their fellow tradesmen and foist deceitful wares upon purchasers: little to gain because no single business could be extended very widely, the number of workpeople allowed for each being limited; much to lose, because punishment for selling spurious and unlawful articles was severe, while detection was likely by

* Thus Le Play laments the vulgar dress spreading to the injury of taste and health (*Organisation de la famille*, 2nd ed. 1875, pp. 141, 142). The German artisan's wife has to be warned (in the manual I have before cited) against the false economy of low-priced goods whether for under or outer garments or for bed covering, and against buying shoes ready made in a shop instead of having them made by a good shoemaker (*Das häusliche Glück*, pp. 151, 152, 153, 155, 159). For English ladies some sage counsels on the extravagance of cheap flimsy materials is given by Mrs. H. R. Haweis, *The Art of Dress*, 1879, chap. V.

the vigilant eye of experts. But now it is just the reverse. There is scarce any limit to the advantage and extension of business that can be got by fraud and falsehood, by puffing and pushing, by supplanting one's neighbours, by enticing purchasers with deceptive cheapness ; while the legal repression of bad merchandise is so feeble and inefficient that the habitual profit is an ample insurance against the risk of occasional detection. Thus the protection has been removed that formerly shielded human weakness, and the phenomenon we can call depraved consumption has naturally followed. For man is as he was. If indeed we suppose every buyer perfectly wise, and perfectly free, and perfectly able to distinguish the quality of the goods he was buying, it would be no use to make bad articles, however lax the law, because no one would buy them. But such a supposition is extravagant and absurd, though its absurdity has not prevented it being made a sort of axiom by Liberal Economists. For as regards expertness, numbers of buyers are almost wholly incapable of judging the quality of numbers of goods ; as regards freedom, many have no time to examine and test the goods, or no ready money to justify the examination : the seller may be their creditor or employer or in some other way their master, or linked to their master, and they may have (as the victims of the truck system) no real choice of shops or of goods ; as regards wisdom it is in human nature to look to the outside rather than the inside, to consider the present rather than the future, to save ten shillings to-day though twenty shillings will have to be paid a few months hence in consequence, to be dazzled, deceived, deluded. So our people are clad in slops ; and even the richer classes, as riches cannot buy either technical expertness or practical wisdom, often wear bad silk and satin, bad leather and bad cloth.

Already several times we have had occasion to notice the liability of mankind to fall into depraved consumption and prefer worse commodities to better (*sup.* § 115, 118, 124, 140, 169, 175, 201, 207). This liability is a fact of no little economical importance, and though conspicuous in regard to clothing applies to many other goods, furniture for example (*sup.* § 201). Here we have been looking at it as affecting

the cost of dress and as being among the causes that may have defrauded us of the gain we expected from the inventions of the eighteenth century. I will not work out this calculation any further; nor at present discuss whether it is not among the sacred and inviolable rights of man to buy and to sell the very nastiest goods he can lay his hands on. But perhaps from what has already been said we shall not judge the ancient peasantry of Germany to be altogether foolish when they say:

Selbst gesponnen, selbst gemacht
Ist die beste Bauerntracht.

that is :

When cloth and clothes at home are made,
The country folk are best arrayed.

§ 213. Extravagance in dress among women is no new phenomenon and does not depend on the fashions in vogue, or on the cost of particular garments. Nevertheless it has assumed new features in modern Europe, and while among the wealthy and well-born it is perhaps no worse than a century ago, it has become a pestilence among the lower ranks of society, bringing discord and ruin to innumerable families, and being among women a sort of counterpart of drunkenness among men. The causes are many; let it suffice to notice as the chief, the decline of the influence of religion, and disobedience to the counsels of the Apostles; the disordered condition of society, each rank aping the dress and manners of that above it (on which I have already spoken § 202, 209); the facilities of salesmen by every kind of flattery and falsehood, of glitter and display, to tempt the daughters of Eve to buy what they had best leave unbought; the introduction and prevalence of the bad and flimsy dress, the cost of which we have just now considered.

By the action of such causes we can account for the dress and manners of women in the towns and manufacturing districts of Western Europe. In England even the country population is infected. Mr. Kebbel (*Agricultural Labourer*, pp. 125, 126) describes how in the North among the rural poor, a girl's savings are devoted to dress, and the result of a year's pinching is seen at the 'statty' ball, that is, a dance

held in the evenings at the fairs for hiring farm servants, when a girl who is generally in wooden clogs and a serge petticoat appears in white muslin, a wreath of flowers, white kid boots and gloves—a spectacle both ridiculous and melancholy.*

The vanity indeed which prompts to such a miserable display is not peculiar to modern England or Europe; what is peculiar is the disastrous result on the family wealth; whereas among many populations the love of personal adornment is turned into a motive of accumulation. This is seen pre-eminently among Mahometans and Hindus, and in the form of adorning the person or the garments with the precious metals, so that the holiday costume becomes a sort of savings bank. Thus in India “it is no uncommon thing for parents to deck their children on festive occasions with ornaments worth hundreds of pounds” (Monier Williams,

* Among the poorer classes in England the ‘tally system’ is much in vogue. The tallyman or drapery hawker induces the wife, generally in the absence of the husband and without his knowledge, to buy clothes and cheap finery on credit, the price to be paid in weekly instalments or at some future time. Generally it is stipulated that the bargain be kept secret for a certain length of time. The law indeed allows the husband, if the goods are not necessities, to return them to the tallyman and refuse to pay; but this is a strong, almost desperate, measure of domestic authority, and also by no means sure of success. For he must make the disavowal of the purchase as soon as ever he discovers the goods; and it is by no means always easy for him to prove that he has been as prompt as is required. See *Chambers’ Encyclop* ed. 1874, s. v. *tally system*. Moreover such is the expense, the inconveniences, and the terrors of legal proceedings to the poorer classes that many will be terrified into paying by the threat of them. And then, this method of getting into debt as well as others is fostered by the cruel law of imprisonment for small debts (on which I shall speak later). Mr. William Tallack in a letter to *The Times* end of November, 1879, notices how a large and permanent proportion of the local imprisonments for debt in some counties consist of the victims of half a dozen or even fewer of these tallymen, who are locally named ‘Johnny Fortnights’ on account of their fortnightly dunning visits, and who, having inveigled the wives of working men into the purchase, at a very dear rate, of drapery in the absence and without the approval of their husbands, have these husbands sent to gaol for non-payment.—On the evil of extravagance in dress in Germany among the women of the lower classes and a confraternity recently founded to check it, see *Christlich-soziale Blätter*, 1879, pp. 29–31.

Modern India and the Indians, 2nd ed. p. 30). And we can learn how this seeming extravagance is really parsimony by marking how it is used in a time of distress. The average tender of silver ornaments every month at the Bombay mint before the year 1876 was £600; but in November 1876, owing to the famine, it reached £7,000, shot up to £100,000 in December, and then kept steadily rising till in September 1877 it reached £189,754; and the total for the two years 1877 and 1878 was £1,946,158 (*Quarterly Review*, April 1879, p. 389). Had the vanity of the Hindus sought display in white muslin and kid gloves instead of silver ornaments, they would not have had as many pence to fall back on as they had pounds. Le Play gives examples from Russia and Turkey of peasant women wearing multitudes of silver coins in their dress.* And gold and silver ornaments have been conspicuous in many of those peasant costumes of Europe which grew up when the mediaeval sumptuary laws fell into decay. So in Friesland the golden cap of the peasant women is worth 300 gulden, or about £25 (Roscher, *Nationalök.* § 231); in Portugal they wear jewellery of Moorish designs worth from £5 to £20 or £30.

Where garments are durable they too can serve as a kind of reserve, and among the peasantry of Europe in the middle of this century the habit was still prevalent of young people before their marriage accumulating a stock, not only of furniture (*sup.* § 202), but also of clothes (Le Play, *Ouvriers Europ.* I. pp. 347-349.) Thus the peasant girls in Hanoverian Luneburg used to fill large chests with many rolls of linen and woollen cloth of their own spinning and weaving (*ibid.* II. 137-8.) To this day in the remoter regions of Italy the girls both among the peasantry and gentry set to work at an early age to prepare their *corredo* or marriage outfit of body and house linen: the peasant will have an oaken chest full of it, the richer bride many cupboards full; and so abundant are the hoards of linen in great houses that washing need not be done weekly as in England, but on a grand scale at long intervals' (*Cornhill Magazine*, Nov. and Dec. 1881, pp. 608, 609, 695) At Martigues on the S.E. coast

* *Ouvriers Européens*, II. p. 264. He notices the great stimulus to saving given by such customs p. 265.

of France the fishermen's daughters begin early to accumulate a trousseau of clothes and house-linen, beside money to buy the long silver chain which is to be part of their costume ; and they wait to be married till they are between twenty and twenty-five (*L'Association Catholique*, Mars 1881, pp. 341, 342.)

Where there is no such salutary provision for marriage, and the practice is hard to keep up where all clothing is bought and is not durable, we are likely to see among the poor the miserable deficiency of clothing as well as of house-linen and furniture, such as is common in London, contrasting with the gaudy and trumpery excess of the more fortunate. Defective indeed as is the stock of clothing among the London workmen both in quantity and quality, it often serves for lack of anything better as a reserve in time of distress and a means of procuring food ; the pawnshops are filled with clothes and boots ; and sometimes—a singular feature of our national manners—the only coat which can be worn on Sunday without reproach is rescued from the pawnbroker on Saturday evening with the proceeds of the week's work, and pawned again on Monday morning to procure food till the weekly wages are again paid.

§ 214. Many interesting chapters might be written on baths and bathing : I can but offer a few remarks as an adjunct to those on clothing. The Jews were lovers of cleanliness and had baths hot and cold, public and private, in houses and in gardens. The use of sumptuous baths was known to the Persians. Among the Greeks washing and bathing appear conspicuous in the Homeric age, and in later times became an excessive indulgence. Thus at Athens in the fourth century B.C. to use often the public hot baths was held a sign of effeminacy, and even put on a par with drunkenness. The Romans in the earlier times used to wash their arms and legs daily and their whole body once a week. The ancient Germans took a bath, generally of warm water, as soon as they rose from sleep. Vapour baths were in use among the ancient Scotch and Irish ; probably also, if we may judge of their past habits by their present, among the ancient Finns and Chinese. But the grand period in the history of baths at least for Europe and Western Asia and

Northern Africa is the period of the pagan Roman Emperors. Already in the later times of the Republic the use of hot water and hot air or vapour and the erection of public baths became common, like much else of the manners of Greece or of Asia ; and under the Empire the use of public baths by all classes from the Emperor to the slaves, became a leading feature of the Italo-Hellenic civilization, and accompanied that civilization wherever it spread. All the decorative arts of Greece and all the constructional arts of Rome were lavished upon the public baths ; the engineering skill they display revealed by antiquarians is admirable ; they were combined under the name of *thermae* with buildings for games, for instruction, and for study ; and those built by Caracalla and Diocletian must have been among the wonders of the world. The science and art shewn in the Roman baths, and the facilities for bathing given to the lower classes form the bright side of the picture. At Rome the charge for a public bath was but one-fourth of an *as* (or less than half a farthing), and often the emperors or private persons gave funds to enable baths to be open gratis. And facilities for bathing if not everywhere so great as at Rome were common throughout the Empire.* But there is a dark side of the picture in the extravagant outlay, in the heavy taxes needed to meet it, in the waste of hours spent at the baths, in luxurious excess, above all in the immorality with which the public baths were infected. Unlike the ancient Roman modesty there was often no separation even of the sexes ; and the abuse of the *mixta balnea* continued in spite of the laws of the emperors, was prohibited by the Christian Council of Laodicea in the year 320, and was so inveterate that traces of it appeared long afterwards (Marquardt, *Privatleben der Römer*, 1879, pp. 274, 275).

* A notable instance is the case of Vipasca, a mining town in Spain. The contractor with government for the supply of the baths was bound to fill them up to a certain level with fresh flowing water both hot and cold, admitting in the morning women for one *as*, in the afternoon men for half an *as* ; while children, soldiers, imperial slaves and freedmen, and the personnel of the mining administration were admitted gratis. See the interesting article by E. Hübner entitled *Römische Bergwerksverwaltung* in the periodical *Deutsche Rundschau*, Band xii. pp. 196-213, and in particular on the baths, pp. 206, 207.

§ 215. The triumph of Christianity put some check, not so much to the use as to the abuse of baths, and taught that they should be used for the sake of health and cleanliness, not for luxurious indulgence. When the West was divided among Teutonic invaders, neither the conquerors nor the conquered gave up their accustomed habits of personal cleanliness. The Anglo-Saxons in their linen garments were lovers of washing and bathing. In Carolingian times we have records of hot baths, and bathing; and in the tenth century an eye-witness in Gaul tells us it was usual for Christians to take a bath every Saturday. In the East the Mahometans, whose rule and civilization spread from Spain to India, had given a religious sanction to washing, and had in particular adopted the hot air and vapour bathing of the Romans. This kind of bathing seems to have received a great impetus in the West through the Crusades, which made Oriental manners familiar, and brought in the Oriental disease of leprosy, for which hot vapour baths were specially recommended. And thus by the thirteenth century few large towns in Europe were without such baths. Their regulations are still extant, how, for example, the Jews were only allowed to visit them once a week, and how there were separate baths for lepers. They were still common in France, Germany, and Belgium at the beginning of the sixteenth century; and indeed the researches of antiquarians and architects enable us to say that during the Middle Ages the use of baths was very common among all classes both in England and on the Continent; to wash the feet of the poor was a familiar act of charity; and the Order of the Bath still reminds us of how he who was to be made a knight first bathed, to signify the purity required by chivalry; there were guilds of bathmen on the Continent; and gratuitous baths for the poor were founded in Germany, if not elsewhere, by the charitable under the name of soul baths.*

* On mediæval baths see the admirable article by Fr. T. E. Bridgett, entitled "*The Sanctity of Dirt*" in *The Contemporary Review*, Feb. 1875 (Vol. XXV.), whence I have borrowed some of the text, as well as from the article *Baths* in the ninth edition of the *Encyclopædia Britannica*. See also Viollet-le-Duc, *Dict. du mobilier français*, t. IV. s. v. *toilette*, and *Dict. de l'architecture française*, s. v. *étuve*; and the article *Bad* in the twelfth edition of Brockhaus' *Conversations-Lexikon*. Of all

But times changed for the worse. In Mahometan countries indeed the public bath house which had been set up in every town where there was a mosque, continued, and are to be found to this day. Among the Russian peasantry the vapour bath (generally taken on Saturdays) is a necessary of life. There is one in every village, and often one attached to the peasant's house. Red hot stones are cast into the water and a dense warm vapour arises. The bather covered with perspiration rushes out and rolls in the snow, or plunges perhaps through ice into the nearest water, thus steeling himself to bear the extremes of heat and cold.* Mexicans and South Americans, Finns and Chinese have also sweating or vapour baths. The Japanese, besides using these, love also to bathe in cold water; the Malay races seem almost amphibious. But in Western Europe the course of cleanliness has not run smooth, and it has come to pass that vast populations have been assimilated to savages and have been virtually deprived of the means of personal cleanliness, which in all the numerous civilizations which have gone before us have, as far as I know, never yet been wanting. The evil—I speak under correction—seems to have begun about the time when in so many regions of Europe the condition of the peasantry was lowered and the religious unity was broken. In France, we are told by Viollet-le-Duc, that the use of baths during the sixteenth and seventeenth centuries was much less common than it had been before, and was confined almost exclusively to the higher classes (*apud Contemp. Rev.* xxv. p. 423).† In Germany the popular use of

the silly calumnies against the Middle Ages, perhaps the silliest is that of their uncleanness, repeated in the most extravagant form and with bitter odium anti-theologicum by Dr. Lyon Playfair at the Social Science Congress, 1874.

* A description of Turkish and of Russian baths from Lane and Kohl is given, *Encycl. Brit. I. c.* On the Russian peasants see also Le Play, *Ouvriers Europ.* II. pp. 62, 109; D. M. Wallace, *Russia*, I. pp. 49, 50, 3rd edit. The vapour bath used in various forms by the North American Indians (before their extirpation) is described by Lewis and Clarke, cited in the *Penny Cyclopaedia*, 1835, s. v. Bath.

† There must have been a subsequent improvement at least by the early part of the nineteenth century. The *Penny Cyclopaedia*, 1835, Vol. IV. pp. 31, 36, noticed that in France there were baths in all the towns, and that bathing was more practised than in Germany or

baths almost ceased, and I think the same can be said of Belgium and England. But even in the upper classes I suspect a deterioration. The Italian gentry of to-day seem, from descriptions by English indeed and perhaps not impartial witnesses, to wash less than their ancestors in the fifteenth century. The awful wars of religion in Germany struck down the elegancies of life. The mediaeval vapour baths of England (called hot houses) seem in the time of Shakespeare and Ben Jonson to have degenerated into houses of ill fame, and must have disappeared, or there would have been no need to revive them at the close of the seventeenth century, under the Eastern name of Hummums, or the Italian name of Bagnios. But whatever may have happened in the past, however little our great-grandfathers may have washed, the present generation of the wealthy in these islands, has developed—and the example has spread across the seas—an almost Oriental devotion to personal cleanliness,* though several of our habits would be censured by the Romans of the Empire and by modern Asiatics. With our poorer classes it is otherwise; the need of washing has become greater, the means for it have become less. The land once abounded in pure streams and pools; but the waters have shrunk up through the clearing away of woods and the draining of marshes and ponds, and what remain have become less pure—nay, often channels of filth—through receiving the refuse of modern manufactories and the sewage of a vastly increased population with a senseless plan of drainage; and much of this population has been collected into vast cities or city-like manufacturing districts where, unless public authority provides the means, washing becomes very difficult; and the new evil of an atmosphere charged with soot or other pollution has rendered soap and water

England, where baths were rare; and how in sickness the poor get advantages elsewhere confined to the rich, the number of gratuitous baths given at the hospitals of St. Louis and La Charité being truly prodigious—the number in 1822 for the out-patients only of the hospital of St. Louis being 127,752.

* Since 1856, under the name of Turkish baths, hot dry air baths have become popular, and in Germany, since 1860, under the name of Irish-Roman baths. They differ from modern Turkish and ancient Roman baths in being more devoid of vapour.

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more needful than ever, and much more of both wanted, not to speak of the increase of many dirty employments amid grease, or vapours, or dust.* Public baths were wanting, while the small and often miserable dwellings of the poor made proper washing at home very difficult or impossible. The evil in England perhaps was at the worst some forty years ago. An 'Association for Promoting Cleanliness among the Poor' was formed about 1844, and in 1846 an Act, strengthened in 1847, was passed enabling local authorities to set up baths and wash-houses on the security of local taxes and on observing certain conditions as to cleanliness, decency and price of admission. As we have already seen (§ 194, 196), something has been done under this Act, but something altogether inadequate to the need. For all London in 1873 only about sixteen public baths had been erected by local authorities, or about one for every two hundred thousand inhabitants.

§ 216. Similar evils, or the dread of them, have in other countries caused similar measures of prevention or palliation. It is not necessary to discuss such measures, because this has already been done by anticipation in the discussion on the fit supply of water and of dwellings for the poorer classes (*sup.* § 161, 196–199). Indeed the matter of personal cleanliness is closely connected with dwellings; and if these are wretched, public baths are of little avail. But such baths help to preserve cleanly homes; and it were well if every large steam factory made some amends for the damage to pure air and pure water, by directing the waste steam or hot water into baths for the use of its workpeople. This could generally be done at a small cost (see *Chambers' Encyclop.* 1874, s. v. *Baths and Wash-houses, Public*),† and the common

* Such causes, as well as a real increase of cleanliness among the rich, and a decrease of smuggling that had been extensive before 1833 (when the duty on soap was reduced 50 per cent.), can amply account for the official return of taxed soap, shewing in 1845 a consumption per head double that of 1801. Roscher, who notices this fact (*Nationalök.* § 228), is hopelessly misleading on the subject of cleanliness.

† Alas, no new suggestion! In the *Penny Cyclopaedia*, Vol. IV. p. 36, published 1835, we read: "Baths should be attached to all large manufactories, as a refreshment for the workmen, to ensure cleanliness, and as a means of warding off many diseases," notably painter's colic and cutaneous diseases.

use of vapour baths might thus be restored. Nor would it be a very difficult task for Christian employers and for the ministers of Christian charity wherever fit dwellings and baths were available for the poorer classes, to bring these back to that degree of personal cleanliness suited to their condition. But where facilities are wanting to the poor, it ill becomes a soaped and perfumed plutocracy to reproach them with uncleanness, and instead of remedying their wants, to label them 'The Great Unwashed,' and thus add insult to injury.

But because we are eager to remedy the deficiencies of baths and bathing in our own time and country, we must not forget that there can be excess. What indeed is excess, and what is the precise degree of washing that forms the golden mean, I will not attempt to determine; and the views that have prevailed and still prevail regarding what are cleanly habits and what are not, differ so widely, that the investigation would be a delicate one. But I can say this much, that the proper degree of washing may vary much according to class, climate, employment, and other circumstances; and that there is a wide field for historical enquiry into the effect under these varied circumstances on health and working power, produced by various habits of bathing and varieties of baths.* There can also be a further enquiry into the healing effects of bathing for various diseases, and into the past and present methods of water cure. And as in this there can be fanaticism—at one time the votaries of hydropathy proclaimed it to be a panacea—so there can be foolish exaggeration in regard to the effect and importance of washing and bathing. No doubt there is among any given population a certain degree of cleanliness both of the person, of the garments, and of the house, without which a rational and decent life in the home and in society is not possible; and in the circumstances of the

* The habit of rubbing or anointing the body with some kind of fatty substance has been very common, not only among barbarous tribes of ancient and modern times (the naked Indians of Guiana shield themselves in this way against the stings of insects), but among civilized races, as the Greeks and Hellenized Romans (who used to be anointed after bathing), and the modern Orientals.

people of the towns and manufacturing districts of Europe the wives of workmen can be well exhorted to love cleanliness as the guardian of health and modesty, and the prerequisite of a happy home.* No doubt also a further degree of cleanliness is fitting for the decent life of a rich and cultivated class. Beyond these limits we verge on luxurious indulgence, of which the Roman Empire has given so notable an example, with its incredible outlay on baths, the immense time and care bestowed on the body, the costly ointments and perfumes used by the rich, unlike the ancient simplicity;† nor need we wonder that this worship of physical cleanliness and attractiveness went along with moral pollution, of which the baths themselves were often centres. But Christian teaching which reprobates the negligence of sloth or of cynical indifference, which has condemned those early Sabatarians who said it was wrong to take a bath on the Sunday, and which urges on us those domestic habits and virtues that find in some measure of cleanliness an almost indispensable auxiliary: warns us also against excess in this as in all other ministrations to the body, and recommends to those who are leading an ascetic life not to be too delicate and fastidious; nor is the Church afraid of being misunderstood by her faithful children when she holds up to their admiration some, who, under exceptional circumstances and under an exceptional impulse, have chosen as a mode of crucifying the flesh to suffer dirt as a penance;‡ while the cultured Greek, with his body and his garments clean and fragrant, as he came out of the public baths after hours of enjoyment, was to Christians no object of admiration, but a sight to move them to sorrow and compassion. Of a truth

* So in the manual for her instruction the wife of the German workman is vehemently urged to love and to practice cleanliness and order (*Das häusliche Glück*, pp. 16, 17).

† "How uncivilized would Scipio now be thought! . . . Wretched man! he knew not how to live. The water he washed in was not only not filtered, but often turbid, and when it rained hard, almost muddy. And it did not make much difference to him if it was so; for he came to wash the sweat off his body, not ointment" (Seneca, *Epist.* 86, 9, 10).

‡ Those who do not understand these matters, but who wish to, may begin by reading the article already referred to on '*The Sanctity of Dirt*,' by Fr. Bridgett, *Contemp. Review*, Feb. 1875, pp. 424 seq.

it is better to have the heart clean than the garments ; and a man is defiled by the wickedness that proceeds out of the mouth and cometh forth from the heart ; but to eat with unwashed hands doth not defile a man (*S. Matt.* xv. 18-20).

CHAPTER X.

RECREATION.

Meaning and Importance of Recreation, § 217, 218—Deficiencies in England, § 219—Six Main Classes of Recreations. I. Social Gatherings: Banquets, Dancing, § 220—II. Promenades: Gardens, Driving, Riding, Travelling, Yachting, § 221—223—III. Intellectual Recreations, § 224—IV. Sensual Recreations, § 225—Innocent Narcotics, § 226—Guilty Narcotics, § 227—V. Sports and Games: Children's Games, House Games for Adults, Athletic Sports, § 228, 229—Field Sports and Game Laws: Use and Abuse, § 230—233—VI. Representations: Combats of various Kinds, Views on the Treatment of Animals, § 234—Gambling, § 235—Displays of Wonders. Musical Performances, § 236—The Drama and its great Varieties, § 237, 238—The Christian Religious Drama, § 239, 240.

§ 217. Recreation I take as merely another word for amusement, or pastime, or play. The meaning of these words, and their opposition to labour or work, may seem obvious enough; but when we seek to define them we meet difficulties like those which surround the definition of labour, and must be content with imperfection. Perhaps the least imperfect description of recreation is to call it human action of which the natural purpose (*finis operis*) is pleasure derived immediately from itself. Recreation in this sense is plainly distinct from labour; for the end of labour is some good outside itself (*sup.* § 53). And recreation is also distinct from certain other human actions, such as taking your meals or your rest or the exercise prescribed by the physician, or such as taking part in domestic conversation or in religious worship; for the end of these is not pleasure.

Such a definition, let us mark, is independent of the motives of the man who takes the recreation. His end

(*finis operantis*) may be simply to enjoy himself ; or it may be to refresh his body and mind in order the better to fulfil his duties ; or again in order the better to labour for some end that is bad. Certain kinds indeed of recreation, witness opium-eating and prostitution, exclude the possibility of a good motive, and some have a strong presumption against them ; but most of them are common to saints and sinners ; and thus we cannot classify them according to their moral character, since most often this cannot be ascertained.

Again, such a definition makes recreation independent of the pleasure of the man who takes it. A formal dinner party and a dance, as dances are conducted in London, are to some people tiresome indeed ; they do not cease because of this to be recreations ; just as labour does not cease to be labour because it happens to give delight to a particular labourer. We must take the distinction of work and play as objective not subjective.

Moreover such a definition makes recreation independent of its physiological results. Of course we can make the word mean 'that which with the least expenditure of time renders the exhausted energies most fitted to resume their work,' or 'the affording of local sleep to the exhausted part [of the body] by transferring the scene of activity from it to some other part'; and we may oppose it to dissipation, this being any wasteful expenditure of vital energies (C. J. Romanes in the *Nineteenth Century*, Sept. 1879, pp. 402, 405, 416). But whether or not such terminology is suitable for medical, it is unsuitable for moral science. Many of our most innocent amusements would have to be classed as dissipation, and there would be no objective test of what was recreation or not, as all would depend on the state of health and other particular conditions of the particular subject ; whereas recreation as I have defined it, has regard to the general object of an action, not to its particular effects on the body, any more than on the soul, of a particular individual.

But I fully admit there are many occupations which cannot be distinctly included or excluded by the definition I have given. Thus the boundary between religious worship and recreation is obscure. A passion play may be so con-

ducted as to be almost an act of worship, and yet can scarcely be denied the title of a recreation. We may similarly hesitate how to classify the religious dances of the pagans. Again, in literature, science, and art, the line between work and play, study and relaxation, the professional and the amateur, is not easy to draw. Nor is it plain whether we are to give the name of recreation to the war-dances of savages, the tournaments of mediaeval Europe, the village archery of merry England, the rifle-shooting and drill of modern English volunteers, or to class them as military exercises like the labour of regular soldiery. And even industrial labour is sometimes separated from recreation by no definite line, and work and play may become scarcely distinguishable. Thus fairs are often social as well as industrial gatherings. They are held in succession during summer in Majorca in all the principal towns and afford amusement to all classes of society, as all classes frequent them (C. T. Bidwell, *Balearic Islands*, pp. 168-170). The statute fairs for hiring farm servants in the North of England serve for amusement, often anything but innocent, as much as for business. Among the peasantry in various parts of Europe when one of them is in need of some great work done quickly, as to get in his hay, or to cut and carry timber to build his house, he invites his neighbours to give a day to the work; they collect in numbers and do it, and end the day with a banquet at his house, this being the only sort of payment he makes them. It is difficult to deny that besides the banquet (as is obvious) their previous occupation during the day is to be called recreation.* Again, the chase among the farmers of the Lebanon is both an industry and an amusement (*Saturday Review*, 10 Sept. 1881); and indeed wherever hunting is only an occasional and supplementary industry it can scarce fail to be simultaneously an amusement.

§ 218. Before considering the varieties of recreation let us consider its importance. And first it can claim consideration on the ground of the vast sums that may be spent on it.

* See Le Play, *Les Ouvriers Europ.* II. pp. 64, 65; IV. p 258. This custom is found in Russia, Brittany, Béarn, and Castile.

There are indeed many kinds of recreation that require little or no expenditure, as rustic singing and dancing, and many games of skill or chance. But there are others on which millions are spent every year, as among ourselves on smoking, drinking and riding in carriages; or on the shows of the circus and amphitheatre of old among the Romans. Many recreations require that those who enjoy them be provided not only with material goods as horses and hounds, carriages and theatres, but also receive the ministrations of servants (as huntsmen, grooms, and coachmen), or of those whose profession is to amuse (as actors, singers, showmen, gladiators). The national expenditure on a given kind of recreation may be great because of the numbers who indulge in it, as expenditure on tobacco; or because those indulge in it spend so much on it, as expenditure on hunters and race-horses.

But recreation claims the attention of economists on other grounds besides those of expenditure. It may have, according to its amount and character, the gravest influence on happiness and morality. A people may be dulled because of too little, enervated because of too much, degraded because of ill-chosen, amusement. It is likely where the quantity of recreation is too little or too great, that the quality will be bad. Labourers overworked, like the mill hands of Lancashire in 1850, are likely to spend the scanty moments of leisure in revelling and riot; while those with too much leisure are likely to get tired of lawful pleasures and to go for a change after the unlawful. It is plain also to reasonable men that there must be some kind of recreation, and that the absence of good kinds means therefore the presence of bad. Hence the negative process of removing bad amusements is of little avail if no good ones are provided. Naturally here as elsewhere we must not forget the complications of causes and effects; we must not repeat that ancient sophistry *intra animum medendum est* (Tacit. *Annal.* 3, 54); we must not say a degraded people will indulge in vile amusements, and that thus it is useless until they are reformed to provide them with good amusements; as though such provision was not precisely one of the prerequisites of their reformation; nor must we fall into the other error and think

the provision of abundance of innocent or refining pastimes is of itself enough, and will of itself reform the common people, to whom their betters give no example of temperance, no protection against needless temptation to this vice or to that, no security for their livelihood, and whom no religion, or only feeble or false religion, holds in control. The matter indeed is in intimate connection with religion, and we can say that where a society is thoroughly imbued with the principles of Christianity and is therefore docile under religious authority, the number of holidays can be multiplied in a way that elsewhere would only lead to mischief. Thus in the happy Balearic Islands about 100 days in the year, that is, some 50 days besides Sundays are kept as close holidays.* And the diminution of holiday time which in England reached its utmost contraction about the middle of the nineteenth century, may be taken to be partly an indication as well as a cause of the degradation of the labouring population.

Recreations, be it added, sometimes play no small part in politics, witness the Roman rabble requiring not only *panem* but also *circenses*, the struggles of factions, and the green against the blue in the circus at Constantinople, the drama made a vehicle of political manifestations, the political caricatures in the licence of the Carnival, revolutionary music and songs (Cf. F. Walter, *Naturrecht und Politik*, § 460). And rural and manly sports from childhood upwards among an aristocracy may greatly help to preserve their political ascendancy, while amusements linked with extravagance and effeminacy may greatly help to promote their political downfall. But with all this we are not immediately concerned.

§ 219. In England we still groan under a superstition only less mischievous than the opposite error of the ancient heathen. They, with inexcusable self-delusion, threw the veil of religious worship over their orgies of cruelty and lust, and made the gods approve of guilty enjoyments. We with heretical perversity have pronounced even innocent

* Bidwell, *Balearic Islands*, pp. 163, 164. The hours of work, let us notice, are from 5 or 6 o'clock in summer, and from 6.30 to 7 o'clock in winter till sunset, with an hour for breakfast and two hours for dinner and siesta. (*Ibid.* p. 114)

enjoyments to be displeasing to the Most High, and by this odious and Manichæan doctrine have forced multitudes into the alternative of sour fanaticism or drunken debauchery. The rise and spread of Methodism in the last century has probably been one of the main causes that have brought on our people the evils they still suffer.* "The fairs, the mountebanks, the public rejoicings of the people were all [held to be] Satanic . . . Whitefield . . . made it his mission to 'bear testimony against the detestable diversions of this generation'; and he declared that 'no recreations, considered as such, can be innocent.' A poor Kingswood collier was noted for his skill in playing the violin. He passed under Methodist influence, and at once consigned his instrument to the flames." In the rules for a school drawn up by Wesley there were neither play days allowed, nor time for play on any day; for "he that plays when he is a child will play when he is a man" (Lecky, *History of England in the Eighteenth Cent.* II. pp. 589, 590). This horrid caricature of Christian asceticism, this confusion, in true heretical fashion, of use and abuse, of counsel and precept, of the arduous ways of perfection fit for the few and the ordinary road for the multitude of the faithful, this denunciation as in itself bad of what in itself is merely indifferent: has led whither we might have expected; and combined with the complete acclimatization of gin shortly before the spread of Methodism (*sup.* § 169), and the break-up of the old industrial organization that was shortly to follow, as well as the enclosures of common lands,† and the

* In Scotland the responsibility must be borne by the Presbyterian Church with the Sabbatarianism it borrowed from the Puritans of England, and was able to enforce after the Revolution of 1688. On the comparatively recent date of the strict Scotch Sunday see Mr. James Gairdner's Essay on *Sundays Ancient and Modern* in *Fraser's Mag.* Feb. 1866, reprinted in his *Studies in English History*, 1881.

† The important subject of commons must be treated at length in the next book. Here it is sufficient to mark the absolute need of common and ample recreation grounds for the games of children and the athletic sports of youth and manhood among the poorer classes in thickly peopled countries. But in England for a century previous to the year 1845 millions of acres were enclosed with scarce any due provision for the poor; and although the Enclosure Act of 1845 aimed at reserving in the case of future enclosures a certain space for allotments and recreation

suppression one after another of popular amusements, has brought us to the depths in which we lie: has made possible the horrid spectacle of the English Sunday as kept by the common people; has forced them into degradation and vulgarity that of old were not their characteristics.* It is true there has been some improvement since the middle of the century, some increase of leisure, some better means of spending it provided, like the Crystal and Alexandra palaces, and access to the country by Sunday trains, and new parks in poor districts, like those of Victoria and Battersea in London. Still the need of popular healthy amusements has grown more pressing with the vast growth of our towns, and in the main that need remains miserably unsatisfied.† Hence,

ground for the poor, yet in the twenty-three years that followed, out of some 600,000 acres enclosed not one-half per cent. was reserved for the poor.—*Cf. infra*, § 221.

* Many allusions to the decadence of active sports in his time among the common people are to be found in Strutt's *Sports and Pastimes of the People of England*, published in 1801. And for at least some fifty years after his time things went from bad to worse.

† For confirmation or illustration of this I can refer to an interesting article by Mr. Jevons on '*Amusements of the People*' in the *Contemporary Review*, Oct. 1878. He marks our grievous deficiencies. "There are still large parts of the manufacturing and more thickly populated districts of the kingdom where pure and rational recreation for the poorer classes can hardly be said to exist at all." He notices the absurd incongruity of the term '*Merrie England*,' and how many popular amusements have become degraded and suppressed, and the vulgarity of the masses when they attempt to amuse themselves, witness the elegant diversion of the young men and women out on Hampstead Heath on a Bank Holiday to squirt at each other through metal pipes, or again the songs and shows of the music halls. Of the children of the London courts (as they were in 1869) Miss Octavia Hill says (*Homes of the London Poor*, pp. 43, 44): "They come wholly ignorant of games [in the proper sense], and have hardly self-control enough to play at any which have an object or require effort . . . Often their games are only repetitions of questionable sentences. For instance, what is to be said of a game the whole of which consists in singing, 'Here comes my father all down the hill—all down the hill' (over and over again), and replying, 'We won't get up for his ugly face—ugly face' (repeated *ad libitum*)? Then come the mother, the sister, the brother, to whom the same words are addressed. Finally the lover comes, to whom the greeting is, 'We will get up for his pretty face.' This was perhaps the best game the children knew." For those who are not aware of the state of their countrymen, some information on the utter dulness, the want of interests, of amuse-

although it is possible and even likely that by a natural revulsion and in an age so devoted to physiology the importance of recreation may be, if it has not already been, exaggerated, and a body of fanatics for recreation be formed resembling the fanatics for vegetarianism, or for total abstinence, or for education: nevertheless we are in such a plight, that any practical effort anywhere in our country to afford any amusement for the people, that can be with any reasonable presumption considered an *honesta recreatio*, though its authors be full of theoretical delusions, deserves our praise and our help.

§ 220. Let us pass from recreation in general to the various kinds, and divide them very roughly into six classes, namely, social gatherings, promenades, intellectual recreations, sensual recreations, fifthly, sports and games, and lastly, representations. The limits of these six classes are indeed often obscure, and the names unsatisfactory; but some classification is necessary, and I know no better.

I. *Social Gatherings.* This title is not meant to apply to every assembly for the purpose of recreation, for then it would include most amusements, but only to those where the main motive of coming together is the enjoyment of society. The prevalence, the character, and the effect of this class of recreation differ much according to external circumstances. For example, the contrast has been noticed between the Burman, with his love of social amusements and keen appreciation of the ridiculous and free admission of womankind to social gatherings, and the Hindu, to whom any free hearty social intercourse is forbid by caste (C. J. Forbes, *British Burma*, pp. 135-137). Christians and Mahometans differ among other things in the one allowing, the other forbidding, the presence of women at banquets. The people of Corca are fond of dancing; but men and women never dance together (Oppert, *A Forbidden Land*, 1880, ments, of present or recollected beauty, in the lives of multitudes of our city populations, can be found in an article 'At Home to the Poor' in the *Cornhill Magazine*, May, 1881, by Mrs. Barnett. "It is greatly to be deplored," says Mr. Romanes, *Nineteenth Century*, Sept. 1879, p. 417, "that, excepting the 'gods' galleries in theatres, there are now scarcely any places where respectable women of the lower classes can witness a public entertainment that is not more or less of a degrading kind."

pp. 143-145), whereas in many countries there is little dancing except between men and women. Social gatherings may be in the form of host and guests, or of members of a club; other occupations, such as eating and drinking, dancing and singing, may be added or not; the expenditure may be next to nothing, as when villagers meet and dance on the green, or half a dozen old dames meet and take tea; or it may absorb vast sums, as when on the occasion of a dance among people of fashion much is spent on ball dresses, on attendants, on wine, on delicacies, and on decorations.

The two kinds of social gathering most conspicuous are the banquet and the dance. The first I pass over with less scruple because, although the various historical forms of banqueting are full of interest and significance, I judge them to be the effects rather than the causes of each constitution of society. And we have mainly to do with causes. But the dance indeed requires our attention. It can act as a powerful cause, and it varies from being an innocent, healthy and useful pastime to being a gulf in which multitudes lose all their money and all their modesty. Among many simple rural populations the dance may be an important part of their life. Mr. H. C. Barkley (*Between the Danube and Black Sea*, p. 49) describes as follows the Khora dance of the Moldavians: "They hold hands in a ring, walk three steps round, halt and stamp, and then lurch and step inwards and back, and then the first three steps again, and so on for hours. They all look solemn and never speak, but at intervals the men give a howl . . . all Sundays and saints' days are devoted to it, and there is no other sort of amusement. While the young ones are dancing the elders sit about smoking their pipes, and on great days drink raki." Dancing is very prevalent in the Balearic Islands, and "a more solemn, steady-going, matter-of-fact business . . . it would not be easy to imagine" (C. T. Bidwell, *Balearic Islands*, 1876, pp. 167, 168). In the east of Italy the one dance of the peasants is the saltarello in the open air; a man and woman dance opposite, and two or three fiddlers play and sometimes sing (*Cornhill Magazine*, Nov. 1881, pp. 691, 692). And numberless examples of the dance as a simple, sober, social pastime might be given. Some are full

of grace and beauty, as the Kardatz dance of the Croatian women (Evans, *Bosnia and Herzegovina*, pp. 74, 75); others are so uncouth and clumsy as to be tiresome or even ridiculous to the idle traveller. But this difference is of little consequence; for the dance is not for the sake of travellers or even artists; and as long as it gives delight without being the occasion of extravagance or immorality, it is of great value, be it never so ungainly.

But there are other cases where dancing is a pest. Mr. Kebbel speaks of the passion for dress and dancing in the North of England: "A day labourer in Cumberland, who calls himself too poor to pay the school pence for the education of his children would feel himself disgraced if he neglected his contribution to the itinerant dancing master. The young ladies themselves carry their savings on their backs." Their tasteless and extravagant display at the 'balls' held during the statute fair at Whitsuntide and Martinmas for hiring farm servants has already been spoken of (*sup.* § 213); but these evening revels give rise to worse evils than extravagance; and are the ruin of morals (see Kebbel, *The Agricultural Labourer*, 1870, pp. 119-132). In parts of France I believe it is a common practice for the parents to stay at home in the evening of the village festival, and for the young people to go all by themselves to the dance that begins about eight or nine o'clock at night, and all by themselves also to return home. The consequences are not other than might have been supposed. At Paris the dancing houses (*bals publics*) are dens of infamy, recruiting grounds of prostitution: little children begin there the apprenticeship of obscenity; when a young girl has been there four or five times she is lost. And in large towns in the conditions of those of England and France it may be perhaps taken as a melancholy truth that among the poorer classes (I am not considering the rich) dancing is an unmitigated evil, a temptation to folly and vice against which they can justly claim some law to protect them.*

It must be noticed that under the present class of recreations we are not concerned with dancing where the

* The horrors of the Parisian low dancing houses are adverted to by O. Cléron le vicomte d'Haussonville, *L'enfance à Paris*, 1879, pp. 247 *seq.*

dancers are mere performers for the pleasure of others. All sorts of theatrical dancing come under the class of representations. Again, where dancing is more for athletic training, like the Pyrrhic dances of ancient Greece, than for society, it belongs to the class of sports and games, not to social gatherings.

§ 221. II. *Promenades*. For the want of a better word let us use promenade to express every kind of recreation of which the main feature is the going forth from the house and remaining out in the air, whether we are at rest or in motion, and whether moving ourselves or being borne along by others. Of this class of recreation the main forms are the use of pleasure gardens, riding, driving, sailing, making excursions and travelling.

The enjoyment of ornamental gardens is a recreation perhaps of all the least liable to abuse. They can indeed like almost every other source of expense, become the means of ostentation or extravagance; and the sums lavished on the hanging gardens of Babylon, on the attempt of the rich Romans to make their town houses seem in the country, on the gardens of the Incas and of the great temple of Cusco where there were flower beds of gold and silver, or on the walks and fountains of Versailles, might perhaps have found some better employment. Still extravagance here leaves behind a lasting acquisition that may turn to the public good. Beautiful gardens, like collections of pictures or sculpture, can at any moment be made a means of recreation for multitudes, unlike what has been spent for example on feasting and equipages; in crowded districts a rich man's park, though he suffer no one to enter it, is a sanitary benefit to the neighbourhood; and those reformers are strangely mistaken who scowl at the English deer parks and would have them converted *pro bono publico* into plots for potatoes and cabbages. Ornamental grounds and woodlands are not like the pastures and hunting grounds of Ireland and Scotland that have indeed devoured the homesteads of the poor, but rather afford to these poor much present or possible benefit.

The history of pleasure gardens, a matter full of interest for the botanist, the artist and the economist, is not for me

to attempt.* I will only urge that when we are looking at the condition of any country at any time, we must not forget to look among other things at the character of their gardens, and how far the enjoyment of them is a recreation in use among the humbler classes. And although for many countries it is an impossible ideal that every inhabitant should dwell in a house surrounded by a flowering garden, it is not only possible, but also a just demand that no inhabitant should fail to have a green or at least open place near at hand in which to take air and exercise. In rural and sparsely-peopled districts the roads and the fields (unless there are absurd laws of trespass) serve in a country like England for a walking place: what is needed is a place for sports and games, and thus for every village an ample, accessible, well-regulated village-green. In towns and densely-peopled districts the matter is more difficult and more pressing; a miserable neglect of the duties of government has allowed numberless acres to be covered with houses for the poor without any fit provision of recreation grounds; the gifts of parks by private generosity, the formation of them at public expense, the check to enclosure of commons near populous places are praiseworthy measures but yet tardy and insufficient;† and it is a sad sight in the poor streets of London, when school hours are over, to see the pavement, gutter, and roadway alike, alive with children at play, having this their only play ground.

§ 222. Among the richer classes in Great Britain riding and driving are two of the principal recreations; and we

* Some interesting historical jottings and—no common merit—some very just and artistic appreciations of history, are to be found in a little book by Mrs. J. Francis Foster, *On the Art of Gardening*, London, 1881. On Chinese and Japanese gardens with their perversities and their beauties see Grey, *China*, II. pp. 196–199; I. L. Bird, *Unbeaten Tracks in Japan*, I. pp. 35, 75, 76, 218; II. 196–8, 242. In the Azores the rich Portuguese apply their riches to magnificent gardens in which trees and plants from all parts of the world are collected and thrive. See Lord George Campbell, *Log Letters from the Challenger*, pp. 24, 25; and *Fraser's Magazine*, May, 1878, p. 557.

† The Recreation Grounds Act of 1852 facilitated private generosity, and an Act of 1860 enabled ratepayers to levy rates for walks, playgrounds or exercise grounds. A serious check was at last in 1869 put to the enclosing of common land.

might almost fancy that the horses, not the men, were the masters. The island is filled with the sleek and well-fed animals in clean and well-built stables; they are the outward sign of their owners being respectable men; to possess or to hire them is the goal of many an ambition; their sumptuous habitations, abundant fare, and easy lot, form an excellent theme for the envious democrat, who can point, as a contrast, to the overcrowded, squalid, hungry, and toiling multitude of men. At present we can leave the questions whether, if our horses were worse, our plebeians would be better, cared for; and whether the corn which undoubtedly we should save were our horses fewer, would as undoubtedly find its way into the mouths of the populace.* Hunting on horseback can also be left till when we come to field sports. But simple riding is a form of promenade; and it is an exercise so healthful and pleasant, so suitable to the physical constitution of both young and old, both men and women, that in spite of its expense in our own country, we cannot say that it is indulged in to excess. But the case is not the same with the recreation we call driving, as far as this means being driven; and we may reasonably doubt whether the end attained is at all equivalent to the gigantic expenditure on the means.† We indulge in

* In Great Britain the horses exceeding 13 hands and not used for trade, or by farmers, clergymen, surgeons, or as cavalry, or as brood mares, and thus not exempt from assessed duties numbered in the years 1858 and 1866 respectively 159,126 and 188,763 (MacCulloch, *Commercial Dictionary*, ed. 1882, s. v. *Horse*).

† Some calculations for the middle of the nineteenth century are made by G. R. Porter, *The Progress of the Nation*, edit. 1851, pp. 530-532.

There were in Great Britain in	1821	1831	1840	1849
Private four-wheeled carriages .	17,555	24,886	28,334	25,447
" two- " " .	30,743	49,331	41,663	28,474
Carriages let for hire . . .	5,480	20,196	34,525	41,621
	<hr/>	<hr/>	<hr/>	<hr/>
	53,778	94,413	104,522	95,542

The annual expense of wear and tear of the carriage and harness and the keep of the horses can be reckoned to have averaged for each carriage £100 in 1850. Some later returns are given in MacCulloch's *Commercial Dictionary*, edit. 1882, s. v. *Coaches*. An annual supply of nearly 30,000 new carriages, exclusive of hackney coaches, is required

patriotic contempt of those wretched foreigners and Yankees who, though in youth and manhood, are effeminately driven about in carriages and will never walk when they can find a vehicle to carry them.* But a physician might hint that many of the diseases and much of the feebleness of the women of the richer classes not only in Continental Europe and America but also in Great Britain, is due to being bred up to what is euphemistically called 'carriage exercise'†; and an economist might suggest that for the infirm or delicate, and, if we must yield to them, for the indolent also, the mode of conveyance, namely the litter or sedan chair prevalent among the ancients and among the Chinese, is as refined and commodious and enables more of our fellow-men to live on the earth instead of more beasts.‡ Nor perhaps can the helpless victims of fashion be delivered otherwise than by the strong remedy of a well-contrived sumptuary law on equipages.

§ 223. Travelling has become among the wealthy in some countries of Europe and America an habitual recreation, on which it is easier to say that much is spent than to say how much. Naturally we must deduct such of the expenditure, as that on food, no longer requisite at home. But many expenses continue almost the same whether a family is to keep up the stock. The number of carriages charged under assessed taxes was :

	In 1856.	In 1866.
Four-wheeled with over one horse	24,735	32,375
Four-wheeled with one horse	47,761	79,538
Two-wheeled	147,243	178,751
Used by carriers	5,471	6,772
Total	225,240	297,486

* Mr. W. Stamer depicts the Neapolitans as considering a carriage the greatest of all earthly blessings, to be kept almost at the cost of the necessities of life, and the consequent immense number of carriages in proportion to the wealth of the inhabitants. (*Dolce Napoli*, pp. 43, 44, 54.)

† Mr. Romanes draws a gloomy picture of the frequent neglect of proper exercise among English women of the upper classes. *Nineteenth Century*, Sept. 1879, pp. 414-416.

‡ On China see J. H. Gray, *China*, II. pp. 170 *seq.* Some interesting jottings on the spread of carriages in Europe in the sixteenth and seventeenth centuries are given in Beckmann's *History of Inventions*, s. v. *Coaches*.

at home or away, for example house rent and repairs ; and thus we must charge to travelling not merely the expense of locomotion (as railway fares), but also all that is paid for lodging and much of what is paid for fuel and attendance. Expenditure indeed is not the same thing as consumption ; much of the traveller's wealth may not be consumed, but only be transferred from his pocket to that of his host or conductor ; and it will be needful in a future place to notice the effect on national wealth where travelling is on a large scale, as the annual summer influx into Switzerland and the outflow from England and Russia. Here we are concerned with it only as recreation ; and I will say no more than suggest as a matter worth consideration, whether at least one-half of British and American tourists (to say nothing of Germans and Russians) are not in so unprepared a state of mind and cultivation, as to be unable to gain any profit, and often scarce any pleasure, from their travels ; and whether most of what is spent in the headlong rush through the Continent is not money thrown away.

The excursionist is a feature of modern times as well as the tourist ; and the immense increase of the railway traffic at Easter and Whitsuntide as well as the numerous summer excursion-trains shew the prevalence in England of this recreation. The excursion is in various forms from the *villégiatura* of some weeks already spoken of (*supra*. § 189) to the 'day in the country' for a school of poor children in great cities. Such days may be well multiplied ; but the excursions of adults among the lower and middle classes cannot claim, in the form they exist among us, any such unqualified praise.

There is one species of recreation which seems to fall under the head of promenades, and which, though quite capable of abuse, is also capable of serving as an excellent pastime for the rich, and a link between them and the poor sailor population, and as a training in seamanship of no small political advantage to a maritime nation. I speak of yachting ; and how popular it is among us is shewn by figures. In 1880 the yacht clubs of the United Kingdom numbered thirty-three, and there were 1,800 yachts from five up to 700 tons burden sailing or steaming round our coasts or on

distant cruises, besides many unregistered private craft (*The Times*, about 2 August, 1880).

Naturally, for the bulk of travellers, for pilgrims and legates, ambassadors and bearers of political dispatches, refugees, emigrants, pedlars, travelling-journeymen, commercial travellers, merchants, consumptive patients hurrying to the South, prisoners being driven to Siberia, and many others, travelling is a necessity, often a painful necessity, and not a recreation.

§ 224. III. *Intellectual Recreations.* Under this head I include all recreation which mainly consists in the enjoyment of literature, science, and art. Naturally the labours of students, artists and authors, though often delightful, are not to be called recreation. On the other hand we do not exclude from this class such intellectual occupations as are means of culture, if their primary purpose is pleasure (*cf. sup.* § 217). The line is difficult to draw; but it is sufficiently plain for us to be able plainly to distinguish the schoolboy toiling at a Greek play with dictionary and grammar, and that boy become a man and a good scholar reading the same play as a refreshment after the day's toil in the law courts or the counting-house.

One class of intellectual recreation is of ancient date. To sit at the banquet and listen to the heroic lays of the bard has been held the height of human happiness (*Odyssey*, ix. 5-11). And it may be questioned whether intellectual recreation has ever been of a better character or more widely spread among the mass of the population than in the vigorous periods of unwritten literature and of epic poetry. Such enjoyment has also the advantage of requiring scarcely any expenditure. More is required when the reading of tales and romances becomes the main form of intellectual recreation. But the application of printing to books, and methods of using them in common, such as public and circulating libraries, make expenditure on them comparatively insignificant.* It is otherwise with the new form of amusement

* Some statistics published in *The Times*, 2 Nov. 1880, give information on the (public) libraries of seven European States:—

which among the male townsfolk of Western Europe and North America has become for rich and poor alike almost a necessity of life, namely reading the newspapers. Thousands a day, millions a year, must in the United Kingdom alone be absorbed in ink and paper and payments to an army of nocturnal printers and to another army of unremitting scribes. How far, if we put aside as an obvious abuse the scurrilous, obscene, revolutionary, and godless press, the use of the remainder deserves our applause; how far the eager perusal by all classes of the horrors of every great accident and the details of every great criminal trial is ennobling, what distinctions are to be made, what restraints put, and the political effects of newspapers, I refrain from discussing.

Under the class of intellectual recreations must be placed visits to museums, picture and sculpture galleries, and such-like exhibitions. But though such recreation is commendable, and such collections of works of art and interest are to be desired, we should strangely err if we attached much importance to them, and fancied that by giving our people the opportunity of enjoying at any moment at their ease even the

	Libraries.	Volumes.	Per 100 Inhabitants.
Austria . .	577 . .	5,475,798 . .	26·8
Bavaria . .	169 . .	1,368,500 . .	26·4
Italy . .	493 . .	4,349,281 . .	16·2
France . .	500 . .	4,598,000 . .	12·5
Prussia . .	398 . .	2,640,450 . .	11·0
Belgium . .	105 . .	609,110 . .	10·4
Russia . .	145 . .	952,090 . .	1·3

Perhaps the United Kingdom is on a level with France with regard to the number of volumes in public libraries to each inhabitant. At Rome there were a considerable number of public libraries in the time of the emperors, none however rivalling that of Alexandria. Probably neither the Greeks nor the Romans ever reached in this matter the level of Babylonia. "It was a kingdom of libraries and books, of schools and universities, of learning and literature. Education and knowledge opened a way to official advancement and State patronage . . . every great Babylonian city had at least one library filled with books written on clay or more rarely on papyrus" (Review in *The Times*, 3 June, 1879, of A. H. Sayce's *Babylonian Literature*). Libraries were conspicuous in the golden age of Arabian civilization; that of Cairo is said to have numbered 1,600,000 volumes; there were others at Alexandria, Bagdad, Tripoli (in Syria), and Fez; and we are told that seventy public libraries existed in Mahometan Spain.

most beautiful treasures of art, we could in this simple way draw them away from a life of vulgarity, brutality and sensuality.

§ 225. IV. *Sensual Recreations*. Where the delight of the senses is the main feature of the recreation it falls under this class, but is not therefore of necessity to be condemned. Of the varieties we can perhaps conveniently distinguish five; but of one only will I speak in any detail. First, bathing when neither medicinal, nor for the sake of cleanliness, nor an athletic exercise (as swimming and diving), can be considered a recreation of this class, liable to abuse as under the Roman Emperors (*supra*, § 214), but in itself innocent. Secondly, eating can assume the character of a recreation, as the gorging so common among the Romans with the aid of emetics, and not unknown, with or without emetics, among ourselves.* But such excesses are little likely to become a grave social malady, unlike the third form of sensual recreation, the use of intoxicating drinks, which use may not only be turned into a recreation, but, as we have seen in a former chapter, become a crying evil. On which I have already said enough. A fourth form, sometimes called by pre-eminence the social evil, is prostitution, an ancient and chronic malady of the human race, and perhaps impossible to be extirpated among town populations even the best with the best civil and religious authorities. But certainly there are many abuses which are neither irremediable, nor only to be remedied by worse evils. There is no reason of necessity or policy why one place of public amusement after another in London should have been successively degraded and ruined by the intrusion of bad women.† No law of nature compels the scandalous traffic in young English girls who have been entrapped for many years past, and exported to dens of infamy abroad. It is not necessary for Russian Jews and others to

* J. Marquardt, *Privatleben der Römer*, 1879, pp. 320, 321, notices that the use of emetics was no device of a few exceptional gluttons, but a common practice. He gives various references. How the Wiltshire labourers once a year at the village club dinner 'gormandize to repletion' is graphically described in a letter in *The Times*, 14 Nov. 1872, by Mr. R. Jefferies.

† Mr. Jevons notices this abuse and its disastrous effect on means of recreation. *Contemp. Rev.* Oct. 1878 (Vol. XXXIII.), pp. 512, 513.

be allowed to turn their industrial capacities to bad purposes, and to grow rich by keeping brothels. And the Contagious Diseases Acts of certain countries might indeed be amended.*

§ 226. The remaining head of sensual recreations is the use of narcotics otherwise than as a medicine. We have come to a matter as grave as that of intoxicating drinks, as hotly disputed, and equally needing the right distinctions to be made. But I can only treat it in outline. It seems to me that all or at least the chief narcotics, when used as a recreation, ought to be separated into two great divisions, the first comprising those of which we can, the second those of which we cannot, presume the use to be harmless. The chief narcotics of the first division are tobacco and betel. The rise and spread of the use of tobacco in Europe and Asia during the last 300 years, the efforts to suppress it, the variety of opinions concerning it, the modes of using it, the position it has won of being a favourite and lucrative object of taxation, form a curious chapter in modern history.† The total amount consumed annually is in some countries immense. Official statistics of consumption may mislead us if there is no allowance made for contraband tobacco. Perhaps we may reckon with sufficient accuracy the average annual consumption in Germany in 1878 at some 6 lbs. a head, not less in Austria, Switzerland, and the Low Countries, perhaps 6½ lbs. (or 3 kilogrammes) in the United States; in France, in 1876, the smaller but still considerable amount of nearly 2 lbs. (0·851 kilogr.) to which it had risen from less than ¾ lb. (0·307 kilogr.) in 1815. The United Kingdom has been content for some time with something under 1½ lbs.‡

We should judge very rashly were we to say that the high figures of consumption in Germany or North America

* The entrapment and export of girls from England, though recently exciting attention, is no recent abuse, as can be seen from Mayhew's *London Labour and the London Poor*, published in 1861-62.

† A favourable review is given in *The Academy*, 19 Aug. 1876, of F. W. Fairholt, *Tobacco, its History and Associations*. London, 1859, reprinted 1876.

‡ In China the great majority of men and women in all ranks and conditions of life are tobacco-smokers according to Gray (*China*, II. p. 149).

implied excess in the use of tobacco. To form a judgment we must know more ; for the point is not the total population but the number and character of the actual smokers ; nor do I think it can be shewn that the use of tobacco among grown men has ever been so much in excess as to become even one of the smaller social evils. Among the young it is perhaps otherwise. It was said of the United States half a century ago (*Asiatic Journal*, Vol. 22, p. 142, cited in *MacCulloch Commercial Dict. s. v. Tobacco*): "It is not uncommon for boys to have a pipe or cigar in the mouth during the greatest part of the day. The death of a child is not unfrequently recorded in American newspapers with the . . . remark . . . 'supposed to be occasioned by excessive smoking.'" About 1874 Dr. Ferguson of Bolton gave evidence before the Commissioners on the Factory Acts, and stated as his belief that one among the causes of degeneration of the factory population was that "at least one-half of the boys in the mills from twelve to twenty years of age either smoked or chewed tobacco, or both ; and . . . there was no doubt this operated most prejudicially upon the healthy development of a growing child." In Germany about 1880 it was judged fit I believe to put in force a law forbidding the use of tobacco by youths under seventeen years old. I will not deny, nor palliate, nor examine the character, or importance, or evidence of such juvenile intemperance, but only look to the use of tobacco among adults. Le Play notices how for certain workmen like the miners of the Hartz whose occupation is very laborious, tobacco gives a daily, oft-repeated pleasure even during the hours of labour, a pleasure that nothing else could supply, and this for a yearly outlay of about ten francs (*Les Ouvriers Europ.* I. p. 364). And assuredly amid the miseries that surround the lower classes in London, especially the aged, tobacco is a solace which it would be extreme cruelty to deprive them of. It is true that Le Play would have smoking confined to only a few occupations among the working classes and seems to dislike it altogether for the rich (*ibid.* and *Reforme sociale*, ch. 46, § 13, 5th edit.). I confess I cannot see the harm. Good-fellowship is fostered ; the wheels of the social machine work more smoothly ; and the sharp distinctions of classes are pleasantly

obscured amid the fumes of a common indulgence. The accusation that smoking fosters drunkenness seems to me calumnious, and perhaps even the very reverse of the truth. No doubt the money might be spent better than on tobacco ; but then it might also and probably would be spent worse. No doubt also the habit of smoking shocks the intellectual pride and artistic pretensions of the apostles of culture ; and they are perplexed and annoyed by the spread of this habit and its prevalence among the most intellectual of modern peoples.* But then there are those who are not at all taken with Apollo or with the manners of the Athenian youths ; and who think the moral condition of man so important, that, provided this is not amiss, they are very tolerant of manners and customs, be they never so uncouth. Far then from condemning the use of tobacco by grown men, I confess I am not scandalized when it is used by those women who have rough work to do in a rough climate, as in some Tyrolese valleys, where the men are much away in the lumber trade and heavy work falls on the women at home (W. Grohman, *Tyrol and the Tyrolese*, pp. 9, 70). In these matters 'live and let live' may be our motto, and that toleration which is so mischievously demanded and granted for moral delinquencies may be claimed in this its proper field of application. Only if we claim it for tobacco we must allow it also to be granted for some other narcotics, in particular for betel. To chew strips of the betel nut rolled in leaves of the betel pepper is an ancient and almost universal practice in parts of Eastern Asia and the islands. The teeth become red ; the gums also and the saliva are discoloured, and spitting is constant : in Burma high officials have a golden spittoon. In the Philippines the workmen are sometimes paid in betel rolls ; this narcotic is an innocent delight of life ; its use does not deserve any more than that of tobacco to be called disgusting or barbarous ; and there seems evidence that it is not only not injurious to health but

* See the lamentations of Victor Hehn, *Kulturpflanzen und Haustiére*, 1870, p. 386. He calls tobacco a poisonous plant and the smoking it a loathsome habit (diese hässliche Gewohnheit) ; and says the fact of a barbaric Indian practice having so spread is a matter for serious reflection (die viel zu denken giebt).

also positively beneficial, facilitating digestion, and probably also hindering intemperance.* So, if there is a case for tobacco, there is an *à fortiori* case for betel. The South American coca may perhaps be added as the third in importance among innocent narcotics;† but it is time to name some of the guilty.

§ 227. The ancients with the leaves and root of the *atropa mandragora* made a wine called morion that induced deep sleep and was used in surgical operations, and then abused, the victims of this guilty indulgence being called mandragorites. A similar abuse of chloral hydrate has recently sprung up in England, and those afflicted with the terrible craving after it are called chloralists (Dr. Richardson in the *Contemporary Review*, July, 1879). And laudanum has likewise been turned from its lawful use as a medicine and made a means of intoxication (*The Spectator*, 5 and 12 July, 1879). It is hardly needful to say that the arguments against the free sale of spirits apply *à fortiori* to these toxicants; the weak women or men who are falling under their sway have as good a claim to protection against them as against theft and robbery; and it is indeed fitting to resist betimes what may else grow to be a frightful malady:

Principiis obsta, sero medicina paratur.

Well would it be if we might here leave off speaking of mischievous narcotics and merely refer to the ancient and wide-spread abuse in the Mahometan regions of various preparations from hemp.‡ Unhappily there is yet one other narcotic that cannot be passed over and the name of which ought to make us hide our faces in shame. I speak of opium, of which the abuse among ourselves, though not

* Cf. F. Meyen, *Geography of Plants*, Engl. tr. 1846, pp. 351 *seq.*, C. J. Forbes, *British Burma*, pp. 85-87; F. McNair, *Perak and the Malays*, pp. 180-185.

† The leaves of the coca taken with a pinch of wood-ashes serve as food and drink to the Indians of Bolivia in their long journeys. (E. D. Mathews, *Up the Amazon*, p. 202. Cf. Meyen, *l. c.* p. 362.)

‡ These preparations are known as *gunja*, *bang*, and *hashish*. It is worth remembering that the ominous and international word *assassin*, dating from the time of the Crusades, comes from the oriental *hashashin*, that is, hashish smokers.

unknown, is comparatively unimportant, but which in China and British Burma works the ruin of body and soul among tens of thousands of victims, for all of whom England, or at least the commercial and dominant classes in England, are responsible. In Burma the evil is so plain that even the dull sight of official optimism has been forced to see it and to take tardy, perhaps insufficient, measures to check it ; and our responsibility for the evil is so plain that we cannot find even a sophistical apology. Opium was prohibited under native rule ; we have introduced it, and scattered over the unhappy country a number of plague spots in the form of shops licensed to sell opium and to make fine profit by selling it.* But though our work in Burma has been bad, our work in China has been worse ; moreover, in spite of the praiseworthy protests of individuals, as a nation we still remain impenitent, and after more than half a century of guilt go on committing an international crime which of all those recorded in history is perhaps the worst. This is not the place to narrate how we have frustrated all the efforts of the Chinese to exclude the noxious drug, how we compelled them at the point of the sword to tolerate our opium smugglers and then again at the point of the sword compelled them to give up even the nominal prohibition of the importation, and since 1869 have constantly refused to deliver them from their hideous bondage. Nor need I attempt to examine the mixture of insolent falsehood, interested sophistry, brutal cynicism, or contemptuous indifference which have been used to harden our hearts ; that opium is a blessing even a necessity to the Chinese ; that

* See the Memorandum addressed to the Government of India in 1880 by C. U. Aitchison, Chief Commissioner of British Burma, printed *Parliamentary Papers*, 1881, Vol. LXVIII. pp. 643-661, and the article on it in *The Times*, 23 June, 1881. Also Appendix E. to F. S. Turner, *British Opium Policy*, 1876. The East India Company according to Mr. Turner (*l. c.* pp. 42-46) at least up to 1829 always discouraged, and successfully, the sale and use of opium in India except as a medicine ; and much more was used in the Native States than in the Company's dominion ; though indeed (p. 52) a certain inoculation with the vice was inevitable. Unfortunately this recognition of the mischief of opium only makes the promoting its consumption in Burma and China more inexcusable.

the vast majority who use it use it in moderation ; that the Chinese are not sincere in their efforts against it ; that if we did not supply it other nations would ; that if the Chinese are to be poisoned it is just as well that the poisoning turn to the benefit of the Indian Revenue ; and so forth.* For I am sure that any impartial student who has sense enough to distinguish between interested and independent witnesses, will soon be convinced, and have to confess the dreadful mischief of opium and the opium trade, and the inexcusable guilt of our policy ; while on those who are too indolent to look, or too blinded by interest or prejudice to see, argument is thrown away. Let it suffice to give a few figures. A rough but reasonable calculation makes the number of opium smokers in China about two million, spending some twenty-five million pounds a year on it, or each about 8d. a day (F. Storrs Turner, in *The Times*, 29 Sept. 1881, from Mr. Hart's report). By the vast majority of these opium is used in excess and they become its helpless victims, ruining their families, and themselves gradually decaying in body and mind, becoming an awful spectacle, unable to leave off the fatal drug without suffering indescribable torments, and thus at last sinking into a premature and dishonoured grave. Nor is it too much to reckon that at least 100,000 of these smokers die each year from the effects of the opium, probably many more, and that consequently every year at least 100,000 men and women, hitherto sound, and probably many more, become infected with this almost incurable vice.†

* See the Parliamentary debates, 4 June, 1880, and 30 April, 1881. The miserable apologies are worthy of the miserable deeds ; and the names of the apologists both in Parliament and in periodical literature had best in sorrow and silence be passed over. Some of the newest apologies are torn to shreds with admirable logic and eloquence by Mr. B. Fosset Lock in the *Contemporary Review*, April, 1882.

† On this subject see F. S. Turner, *British Opium Policy*, 1876 ; *Idem* in *Nineteenth Century*, Feb. 1882 ; Edward Fry in *Contemporary Review*, Feb. 1876, pp. 447-459 ; Theodore Christlieb, *The Indo-British Opium Trade*, transl. by D. B. Croom, 1879, and the literature of the Opium Question referred to *ibid.* pp. 5-7. See also the Parliamentary debates and the comments of the Press on them, June, 1880 and April 1881 ; in particular the reprint in *The Echo*, 7 June 1880, of a long speech by J. Passmore Edwards, delivered in 1858, which may well fill us with shame, for indeed we cannot plead ignorance. See also three

§ 228. V. *Sports and Games*. This class of recreation can be conveniently subdivided into children's games, house games, athletic sports, and field sports. On the first I will only notice that when we are reckoning the well-being and happiness of a nation the games of children are no small item in the account; and the premature or excessive enforcement of study or of industrial labour on children is a cruel abuse, the offspring of folly or avarice. I have already marked the want of fit play-grounds out of doors for the children of our great towns (*sup.* § 221); and within doors through the want of roomy cottages and through the crowding of several families into one house there can be no separate or adequate play-room (see *supra*, § 185, 192); and we may well sigh when we think of what might be, of past times in England,* and of the joyous childhood of the peasantry of many foreign lands. "In Eastern Europe," says Le Play, speaking of the middle of the nineteenth century (*Ouvriers Europ.*, I. pp. 276, 277), "and wherever the manners of the past are preserved, the children till the age of puberty are not bound to any regular labour, but choose among the occupations of the family those which for them have the character of an amusement; and they always develop in the freedom fit for their age."

House games for grown people are sometimes a trial of bodily skill, as billiards; sometimes of mental skill, as chess; sometimes of mere luck, as dice; sometimes of mixed character. They can be abused for the purpose of gambling, and some of them are of such a character that they can hardly be of any interest for any other purpose. Others in themselves innocent and interesting have fallen into bad hands, like billiards and card-playing, that suffer in repute from the bad character of many of their players. The expense of some of these games is great, billiards can again serve as an example; while others cost nothing, like the ancient and

excellent articles in *The Tablet*, 4, 11, and 18 Febr. 1882, on '*Opium and the duty of Catholics*.' The consensus of medical and missionary opinion on its terrible effects is conclusive.

* See the last chapter of Joseph Strutt's *Sports and Pastimes of the People of England*, 1801, 4to. (edition in 8vo. by W. Hone, 1879). An interesting chapter might be written on the history of toys and their manufacture.

still popular game of *mora* among the Italians, which consists in guessing the number of fingers held out for a moment by the other player. Two great advantages of house games are, the one, that they are the solace of declining years, the other that they can in a way peculiar to themselves unite the different periods of life, and engage youth and old age in a common pastime.*

Athletic sports can be taken to mean all games that require serious bodily exertion and yet are not the pursuit of any animal. Their number and variety make an arrangement difficult, and I will only give some of the different species.† One is locomotion, namely, running, riding rapidly or driving rapidly, skating, swimming, bicycling, and the various trials of swiftness or skill in each of these modes of progression. But where races are run by professional men not for their own pleasure but for that of the spectators, the recreation falls under the head of representations, not of sports. A second species of athletic sports is where a ball is struck, whether with the foot or the hand or some instrument; as in modern football, fives, golf, cricket and tennis among ourselves, or the Chinese game in which the feet are used to keep a shuttlecock from falling to the ground. A third species comprises such games as the humble nincpins and skittles, the venerable and neglected bowls, the kindred game of *bocce*, the delight of the Italian peasantry,‡ or the *uru maita* of the Hawaiians, that is, the sport of rolling a stone between two distant sticks (Mrs. Brassey, *Voyage in the Sunbeam*, p. 276). A fourth species is where we seek to

* See Strutt, *l. c.* Bk. IV. Ch. II. on dice, chess, draughts, backgammon, card-playing and other similar diversions. On gambling see *infra*, § 235.

† See in general the work of Strutt already referred to. Also Robert Macgregor, *Pastimes and Players*, London, 1881.

‡ The game is often forbidden by the authorities on account of the [supposed] dangers to [bourgeois] passers-by, who have to dodge the wooden balls (*Cornhill Magazine*, Nov. 1881, p. 693). But whether authorities who have any love and care for the peasantry and the poor ever issue such prohibitions, or enforce them if they are issued, may be well questioned. The delight the inhabitants of modern Rome took in the game (before the seizure of the city in 1870) is described by Story, cited by Macgregor, *l. c.* pp. 116, 117.

hit a distant mark by throwing or slinging, or again by shooting with a bow, cross-bow or any kind of firearms. A fifth is the sham-fight, or any military exercise, not of paid gladiators or prize-fighters, for that is a show, but of those who engage for pleasure in boxing, wrestling, tilting at one another in a just or a tournament, running at the quintain, once the delight of our country people, and running at the ring, an excellent pastime for cavalry.

§ 229. In judging of athletic sports we must beware of indiscriminate praise; for even they can be abused. Some may be so rough or prolonged that serious injury to limbs or to health may be frequent, as perhaps the rustic football of the seventeenth century; some even may bring serious risk to life, and for this reason the ecclesiastical authorities strove against tournaments or their abuse. But a risk that is only remote, is scarcely a serious objection. Again even the most innocent and healthy of sports can be made the occasion of gambling and of bad characters collecting together. Thus in the fifteenth and sixteenth centuries the English bowling greens were places of ill repute. Cricket was a means of gambling and swindling at the beginning of the eighteenth century. And a disgusting and indelible stain of the vilest immorality pollutes the memory of the Greek gymnasia, immorality which was probably caused and was certainly fostered by the athletic sports, when the ancient modesty of clothing was cast aside. We must therefore remember the liability of every human institution to grow corrupt, and that even athletic sports require the watchful eye of Church and State. Still in the main they deserve praise as antidotes to the dangerous allurements of other classes of recreation and as promoting a sound mind in a sound body; and the British Islands in this at least are happy that in the sons of the rich is implanted a love of healthy open air sports, unlike the *jeunesse dorée* of modern Italy or France.* The serious

* W. J. Stamer, *Dolce Napoli*, pp. 153-155, notices the love of the Neapolitans for town life, and the absence of open air exercise for boys and girls, as well (pp. 60, 61) as among the young men of the upper classes, whose delight is in balls, theatres, billiards and cards. It was not so of old; and much of the responsibility for the unhappy change falls on the crooked anti-feudal policy of Charles of Bourbon and Tanucci in the eighteenth century, and on the revolutionary changes at

love of the Basques for athletic sports and their national game, a kind of open-air tennis (*Fraser's Magazine*, May, 1878, p. 652), are to be highly approved as well as most other of the customs of that excellent race. It is a good trait that among the Tyrolese the rifle-shooting match is the great event on any festive day and that no bad weather will keep them from it (W. Grohman, *Tyrol and the Tyrolese*, pp. 77 *seq.*). The active sports of the young Dyaks of Borneo as well as their indoor games form a pleasant feature of this docile race (A. R. Wallace, *Malay Archipelago*, 7th ed. pp. 88, 89).

But let us return home and lament the lack of athletic sports among the bulk of the English people and perhaps also now even of the Scotch, a deficiency all the more striking from the contrast with the manly exercises of our wealthier youth, all the more painful from the recollection of the past and the ancient exercises of the common people both of the town and of the country. But of this evil, and its causes, and the need of reformation, and of abundant provision of spacious recreation grounds, I have already spoken (*sup.* § 219, 221).

§ 230. The name of field sports can be given to a class of recreations with a singular character and history, and which consist in the pursuit of some wild animal, sometimes without, oftener with, the help of domestic animals as horses, dogs, and falcons. Such were the hawking and hunting of the middle ages and the modern fox-hunting, deer-stalking, angling and shooting. These recreations form a staple of violent controversy; and in fear and trembling we must hasten over the ground exposed to a number of cross fires. Sober or sour economists, the champions of the fields, denounce the injury done by the game and the hunters to the crops; others, the champions of the people, denounce the iniquity of game laws, the abominable monopoly of the rich, the odious survival of superannuated feudalism, and would have the people re-enter on its rights to the chase; but then

the beginning of the nineteenth.—How the admirable game of *pallone*, a kind of tennis, once was held in the highest esteem and was the favourite pastime among Italian gentlemen like cricket among ourselves, see Macgregor, *Pastimes and Players*, pp. 61–65.

the champions of the animals pour forth upon us the vials of their wrath, and tell us we take a barbarous and brutal delight in the terror, and torture, and death of innocent creatures; while the champions of the sports declare them almost necessary if we are to be men, or at least Englishmen or gentlemen; and hold them among the foundations of freedom and of the British constitution. So if a man go forth and shoot a partridge, it becomes a delicate enquiry whether he is an oppressor or a patriot, whether he is near being a murderer or is a noble example of a man. Still perhaps even here it is possible after some preliminary explanations to reach some sort of conclusion.

First, to escape one difficulty, I will not argue with those who say it is wrong to pursue animals and kill them, and that to make such pursuit a recreation is essentially degrading and wicked. For the degradation is contradicted by daily experience and all history; and the wickedness is a matter of theology, on which I altogether decline to submit to self-constituted teachers. I will only notice that the notion of field sports being wrong is no new notion, and the assimilation of animals and men is a reversion towards Buddhism. 'Preserve life' is a maxim of the Buddhists. They set pigeons at liberty; they will take a fowl or a pig and have it tended by monks till it dies a natural death; they rescue fish from the stall of the fishmonger and place them in the ponds of the monasteries. The influence of such a religion is naturally adverse to sport (Gray, *China*, I. pp. 126, 127, 396).* But we are concerned only with those who are not votaries of any such religion.

Secondly, we have not to consider hunting as an industry or as a defence against noxious beasts. No doubt the pursuit of animals for the sake of pleasure is historically connected with their pursuit for the sake of a winter provision of warm fur clothing and of fresh meat, and also for the sake of personal security (Roscher, *Ackerbau*, 7th ed. § 173). But the question is not about the industries and necessities of a

* Various other superstitions can act as a check on field sports or certain kinds of them. In Southern China birds are held to exercise a good geomantic influence over the surrounding country (Gray, *l. c.* p. 396). In India the deadly cobra is protected by superstitious veneration.

sparsely peopled land, but about a form of recreation ; and in a populous country it is sophistical to say in defence of field sports that they keep down vermin and provide wholesome food. This argument in their favour must be rejected no less than the previous argument against them.

Thirdly, let us utterly cast away all defence of the preservation for the sake of sport of any animals seriously dangerous to human life, like tigers in British India, that devour several thousand men annually, or wolves, that are a scourge of Russia, or African lions.*

§ 231. After the preceding explanations I think we can appeal to history and experience as justifying the proposition that field sports as a whole and in themselves are an admirable class of recreation, innocent, healthy, and diverting from sensual indulgences, while under particular circumstances they can confer other advantages. They may be an admirable military training for a whole population, witness the Tyrolese skilled in firearms through chamois-shooting over the village preserves, or the redoubtable Boers of South Africa. And where for the richer classes of society there is the strong attraction of polished town life, field sports may be invaluable as being perhaps the only spell that can keep landowners in the country and prevent the disastrous evils of non-residence (of which I will speak in the next Book). Also for many others who are obliged by commercial, legal, or political occupations to have their habitual residence in towns, field sports supply what mere athletics or travelling cannot, namely, friendly communication with the common people, and healthy converse with the world of animals and plants. They are particularly suited for that middle age when a man's revenue is more likely to be adequate to their expense and when athletic sports are likely to become distasteful because the palm of victory has to be yielded to younger competitors. Moreover in some climates unfavourable to athletic sports the chase may be almost a necessity for the health and morals of the wealthy youth. And when we

* Roscher, *Ackerbau*, 7th ed. § 174, note 19, refers to *Cod. Theodos.* 5, 92, for the fact that from the reign of Commodus to that of Honorius it was unlawful to hunt lions except for the circus, and there was a heavy fine for killing one even in self-defence.

witness the faded or painted cheeks of many ladies of fashion on both sides of the Atlantic, we may well sigh for the mediaeval hunting parties sometimes composed wholly of ladies, and lament that the use of firearms has displaced the pastime of hawking, which was so suitable as a feminine exercise, and was so popular among mediaeval ladies.*

But the more we praise field sports the more we are bound to recognize and remove the abuses which, as history too plainly tells us, are liable to accompany them. There seem four main heads of abuse, first undue restrictions of the right of taking game, secondly injustice in the treatment of offenders against game laws, thirdly want of fit compensation for mischief done by game, fourthly undue absorption of land and produce for preserving game. Let us say a word on each.

There is nothing unjust in some qualification being required before being entitled to pursue game. It is no doubt a good thing when the peasantry, as in parts of Spain and Russia, can practise field sports unhindered no less than the gentry (see Le Play, *Les Ouvriers Europ.* IV. pp. 279, 280, 287). And in rough mountainous countries like the Tyrol there seems no reason why the wilds should not remain for ever the communal property of the villages and a perpetual preserve, affording shooting to the villagers. It is otherwise in thickly peopled lands, where there are large towns, and inequality of wealth, and a rich upper class. Here if any one or even any landowner however small might take game at discretion, wild animals would soon be extirpated. The upper classes would lose the field sports that serve them as a sort of antidote against corruption, while the lower classes would lose the friendly presence of the rich, and one great channel of intercourse with them would be cut off. In such countries restrictions to the right of sport are in place; but the particular kind of restriction best suited to the particular case, whether for example it is sufficient to prohibit taking

* See Strutt, *Sports and Pastimes*, Bk. I. ch. I. and II. It might be well for many of us to study a figure there given in Engraving No. 8, of a lady bearing a falcon on her hand, to look at her feet, her waist, her head-dress, her attitude, her occupation, and compare her with the latest elegance of Mayfair.

game during the breeding season or taking any very young animals or using certain destructive modes of capture; or whether in addition it is fit to forbid a man keeping or using the animals and instruments of the chase unless he owns a certain quantity of land, or belongs to a certain rank or profession, or purchases a licence with money: must depend on the particular circumstances of the country.* The abuse is where such restrictions are introduced sooner or extended wider than is needful, or where no adequate compensation is given, the rights of the commoners being unjustly disregarded and immemorial customs roughly handled, as for example by the nobles in Normandy in the tenth century, by the Norman kings in England in the eleventh century, by the German princes in the sixteenth century.

§ 232. The second abuse is injustice in the repression and punishment of offences against game laws. An ancient example is that of the early Norman kings of England, who introduced a cruel forest law; loss of eyes was the penalty

* In England for many years previous to the reign of William IV. the qualification for taking or selling game was the ownership of lands for an estate of inheritance of the yearly value of £100; or for life, or ninety nine years or upwards, of the yearly value of £150. I confess I do not see how this was an 'arbitrary restraint,' in spite of the solemn opinion of Stephens (*Commentaries*, 6th ed. IV. p. 584) and Blackstone, and though the Roman lawyers declared that animals *ferae naturae* were *nullius in bonis*. At present in England and Wales any one who chooses to pay for a licence is entitled to shoot on his own land or any other with the owner's permission. For the whole of the modern law in the three kingdoms see G. C. Oke, *Handy Book of the Game Laws*, 3rd edit. 1877, by J. W. Bund.—In Prussia the land must be at least 330 Morgen (over 180 acres) in extent all lying together, or must be surrounded by a complete and durable fence, if it is to entitle the owner to take game. Other land—and there is much of it, because there are many small owners and few fences—is divided into sporting districts, and these, according to the decision of the local authorities, are either left undisturbed or else the shooting over them is let out to professional sportsmen, and the shooting-rent received is divided among the landowners. A licence for shooting is also required. In Austria there is an analogous limitation to the size of the property entitling the owner to shoot. In France a licence has to be bought. As the chase had been declared at the Revolution to be *du droit naturel* it was no wonder that when in a few years the need of a licence was introduced there was a violent outcry against the *vendre pour l'argent l'exercice d'un droit con.mun à tous*. (See Roscher, *Ackerbau*, 7th ed. § 174.)

for killing a stag or boar; and the Charta de Foresta granted in the year 1225 was as needed as Magna Charta itself. But the classical time for barbarous game laws was the century that in so many parts of Europe was marked by both the overthrow of the power of the Church and the trampling down of the peasantry. Thus Henry VIII. made certain kinds of poaching capital offences, an Act repealed indeed under Edward VI. in the general repeal of his father's statutable felonies. A Scotch Act in 1571 punished with death the third offence of destroying pigeons, and a stringent English Act was passed in the first year of James I. In Denmark in 1573 the lord of the hunting might blind or execute the poacher without further ceremony (Roscher, *Ackerbau*, § 174, note 5); and, looking to the German champions of Lutheranism, we find capital punishment in the game laws of Christopher 'the Pacific' of Württemberg (1551) and Augustus 'the Pious' of Saxony (1584); while John Frederick 'the Magnanimous' issued penal edicts against the 'game-devouring' peasants even in the midst of his 'glorious' captivity; at which conduct Professor Roscher is much pained (*ibid.* note 11). And there were many capital punishments in the French ordinance about the chase in 1601 (*ibid.* note 8). At the present time among ourselves in England and Wales, in spite of the mitigation brought by the law of 1831 (1 and 2 William IV. c. 32) repealing almost all the former statutes,* it may be well questioned whether the severity of the punishments for poaching is either just or expedient; whether it is edifying to see those who procure the game sent into penal servitude or imprisonment with hard labour, while those who receive and sell the game grow rich in tranquillity; whether the bribe of one-half the penalty to the informer is an encouragement to virtue; whether reverence for the law and trust in its impartiality is likely to

* The injustice and oppression of the English law previously, is described by Mr. Spencer Walpole, *History of England*, I. pp. 158-160. Blackstone in a famous passage in his *Commentaries* spoke of the Game Laws of his time as being like the abusive forest laws productive of tyranny to the commons, "but with this difference, that the forest laws established only one mighty hunter throughout the land; the game laws have raised a little Nimrod in every manor." And they grew worse after his time.

be promoted by the magistrates in cases of poaching often being judges in their own cause. No doubt the repression of poaching is a difficult problem, but for all that, it is not insoluble.*

The third abuse is the withholding of fit compensation for the damage which in highly cultivated countries is done by game or by hunters. Had more regard been paid by some of the continental nobility to this claim, the injustice of revolutionists, who swept away rights of the chase without any compensation, would have been more evident. But perhaps this delicate matter is better adjusted by customary than by written law ; and if for example the preservation of foxes in the United Kingdom and the compensation for damage done by them and their pursuers, were made a matter of strict law, a fatal blow might be struck at fox-hunting. Let it also be remembered that the justice of compensation is only self-evident when either new preserves are made or new modes of preserving introduced or some

* It is certainly painful to consider how many years have gone by since the Parliamentary Enquiry of 1845 into the Game Laws and the Resolutions of the Committee, and how few of those mild and sober Resolutions have been made law. The penalties are still cumulative, still excessive ; the informer in certain cases still gets the half of them ; the time for appeal against any summary conviction has not yet been extended ; a person convicted of night poaching with no aggravating circumstances is still liable, not indeed to transportation, but to its substitute, penal servitude, and is still required to find sureties for not repeating his offence. And of the weighty recommendations of Oke in 1863 (added to the 2nd edition of his *Handy Book of the Game and Fishery Laws*, pp. 23-25), we may well ask why at least the ninth has not been enacted : " Prohibit justices from interfering in Game Cases, where they are in any way interested in the game, or the land upon which the offence is committed—where related to a person so interested,—and where the parties to the proceedings are the servants or tenants of either." —Mr. Keibel, amid many remarks by no means to be commended, is right in noticing how the law fails to check unlawful traffic in game. " Poulterers and fishmongers continue their dealings with the poacher in almost absolute security, and have been known to joke even a county Member about the pheasants which they had from his preserves " (*The Agricult. Labourer*, 1870, p. 158). He suggests that all game preservers should be forced to take out a separate licence for selling game : they would then either supply more to the dealers, or cease preserving ; in either case making poaching less profitable (*ibid.* p. 159).

extraordinary damage done ; and the poor freeholder or cottier will not find it a happy change to have to seek his compensation by a lawsuit instead of appealing to the unwritten law of *noblesse oblige*.

§ 233. On the last abuse, the undue absorption of land and produce for the sake of game, I will say but little, or on the means to check it, because it is part of the wider question of the limitations of ownership and agrarian constitutions, and cannot be treated properly apart from these. Let us only look for a moment at the cost of field sports and the likelihood of its being excessive. If we deduct what is mere transfer of property from one person to another, such as rent paid to the owner of a deer forest or wages to a gamekeeper,* the cost of sport is mainly composed of the four following items: first the labour of all assistants of the sport immediate or remote, as keepers, dog-trainers, stablemen, saddlers, gunmakers ; secondly the property absorbed for implements of the chase, as fishing-tackle, guns, dogs, horses, and the kennels, stables and food required for them ; thirdly the land absorbed as hunting-ground, or water surface for a fishery ; fourthly the damage done by game. On the other side of the account must be put the captured game. Obviously these different heads of cost and this source of remuneration much vary with the different sport. In fishing this remuneration is often I suppose enough to outweigh all the costs of the sport ; in

* Naturally such transfer may be an important feature in the relations of different provinces or countries, and a stream of wealth may flow out of one into the other, bringing a corresponding increase in resources and population. Thus in Scotland, although a large portion of the £300,000 or thereabouts, which is the sum of her shooting and fishing rentals, is conveyed out of the country to absentee landowners, yet a far larger sum is spent by the sporting tenants in other ways which in the main help to form a revenue for a large class of persons, keepers, gillies, dog-trainers, hotel-keepers, coach proprietors, local carriers, domestic servants, and others, who else could get no living in the highlands. (*Cf.* Edinburgh correspondent of *The Times*, 28 Sept. 1878.) Of course this revenue must come from somewhere and the shooting tenants must have English mill-hands, Irish cottiers, Hindoo ryots, or some people working for them somewhere ; but this does not alter the fact of the material benefit to Scotland.

grouse shooting it covers a considerable portion of them,* in fox-hunting it is altogether nothing. Again, the item of damage in wild moorlands is next to nothing compared with the ravages of winged game and especially hares and rabbits that issue from small coverts in the midst of cultivated districts.† In calculating the item of land absorbed, we must of course consider quality as well as area, and not confuse bleak moorland, fit for nothing but to serve as a hunting ground, with ground fit for tillage, or pasture, or timber. And we must consider how far the use of land or water for field sports prevents its use for any other purpose of industry or enjoyment, whether the hills are left accessible to the pedestrian and horseman, and the waters to the oarsman.

The elements of cost therefore are very various; and the undue absorption of land and produce for the sake of game can take a variety of forms. The common people and travellers may be unduly excluded from large tracts of

* Some interesting calculations on 'The Grouse Harvest' were made in a paper in *The Times* about 23 Dec. 1876.

† A gloomy picture of these ravages in Lincolnshire was drawn by a 'special commissioner' in *The Daily News*, 6 Oct. 1879: "Game depredation means that, anywhere in the neighbourhood of coverts, you get three quarters of barley per acre instead of five. Your wheats are damaged by hares and rabbits in a way which makes the estimation of damage rather difficult. Riding past a crop you might think it level and upstanding; but go into it and you find innumerable tracks leading to plots which are eaten down and thus cleared as 'play-grounds.' Rabbits nibble the roots and stems of young quick and destroy scores of yards together of good hedgerow; in addition to which the keepers ruin the hedges in innumerable places in digging after ferrets when catching rabbits." If a root crop is enclosed by wire fencing "the keepers lift the bottom of the wire net by putting their feet under, so as to make openings for letting the rabbits in. . . To kill a hare or a rabbit is the quickest way to get a discharge from the farm. The ground game ruin the farmers' gardening. They destroy what labourers attempt to grow in their cottage gardens; which seems one of the most cruel results of over-preserving game. The clergyman of one village says he has abandoned planting any vegetables in his own garden, as he never has been able to get a return worth the trouble solely from the devouring of his produce by the game. . . I heard of one case in which a field of turnips, lying far away from any other roots, was wholly consumed by flocks of hares."

country. The produce of farms may be unduly lessened by over-abundance of game—the Ground Game Act of 1880 was directed against this abuse.* Worst of all, cottages and villages may be displaced to make way for the solitude of hunting grounds; but this last abuse we may say is comparatively rare; and for one peasant evicted for the sake of preserving game, history can tell us of a hundred evicted for the sake of pasture and profit. Again, prodigals can ruin themselves with their hunters and hounds, grooms and game-keepers, shooting and fishing rents. But among ourselves for one so ruined, we can point to a hundred ruined by banquets and carriages, or card-playing, or horse-racing, or licentiousness.

§ 234. VI. *Representations.* Under this the sixth and last class of recreations let us include every kind of spectacle or show where the recreation is not in performing, but in witnessing the performance. We can distinguish four principal kinds of representation: contentious, marvellous, musical, and dramatic; or the struggle, the wonder, the concert, and the play.

As regards the first, history and experience declare the irresistible attraction of witnessing almost any sort of struggle, whether a trial of skill, or strength, or swiftness; whether between men, or between animals, or men on one side and animals on the other. Such for example are foot races, wrestling matches, prize-fights, gladiatorial combats; such are the sports of horse-racing, dog-fighting, cock-fighting, rat-killing, baiting bears, badgers and bulls, and the tiger and buffalo fight of the East; such too are the bull-fights of the Peninsula, and the many deadly struggles between men and beasts that were to be seen in the Roman amphitheatre. There is great variety in the expense of these combats. The fight between schoolboys is fought and witnessed gratis; the outlay on rat-killing and cock-fighting is moderate; but Spanish bull-fights are a serious expense;

* This Act (43 & 44 Vict. c. 47) gives to the occupier of land a right to kill hares and rabbits and makes this right inseparable from his occupation, and makes utterly void all agreements, contracts, understandings, whereby he would suffer any loss for exercising this right or receive any advantage for waiving it.

and gigantic sums were absorbed in antiquity by the combats of the amphitheatre and are absorbed at present by horse-racing.*

All these struggles can be made the occasion of gambling ; but they are not alone in this, and need not be used for any such purpose ; and therefore it is well to look at them first apart from this abuse, and then to examine the question of gambling separately.

It is easy to begin and condemn with horror the Roman amphitheatre and every combat where the death of a man, or the great likelihood of it, is part of the entertainment. Nor can we approve any combat where, although a man's death or grave bodily injury is not intended, such an accident is not improbable. But the mere remote probability of even a fatal issue is of itself no valid objection, or there would be few recreations left. Whether the risk is remote or proximate in the English prize-fight as distinct from the boxing match, and in the Spanish as distinct from the Portuguese bull-fight, are questions of fact I will not enter on.

So far there is little difficulty. But were any one so simple as to think that, if contests are free from proximate risk to life and limb, and are not abused so as to be an occasion of idling, extravagance and bad company, any of them may be an

* Some interesting statistics are given in *The Tablet*, 4 Feb. 1882, on horseracing in the United Kingdom. In the years 1865-1881 about 2,000 horses have always been kept in training for flat-racing and about 3,000 brood mares for the purpose of breeding racehorses. If we add yearlings and foals we find that more than 8,000 horses are constantly kept in the United Kingdom for racing purposes alone. The food and stabling required by these 8,000 horses is a notable item of national expenditure, the attendance they require absorbs no little labour. Naturally much of the private expenditure on 'the turf,' and all winnings from it, are mere transfers of property not to be reckoned on the national balance sheet : such as the fabulous sums paid for the purchase of racehorses and all losses at the club or in the betting-ring ; as well as the winnings in stakes and by betting. It is to be noticed that the stakes run for in the United Kingdom in 1880 amounted to £387,909 exclusive of steeple-chases, matches, and the prizes given in certain races to the second and third horses, breeders, etc. Thus you can win money on the turf without betting, and in fact a certain owner of horses who never bets won in five years about £120,000 simply in stakes. But this is quite exceptional, and the total expenditure on racehorses by those who keep them must far exceed the total amount of the stakes.

innocent recreation, he would in Great Britain quickly find himself under the ban of public opinion, and quickly fall, if he sought to act upon his opinions, into the hands of the criminal law. This misguided stranger would have to learn that many sports are forbidden as cruel to animals, quite apart from any effect on the spectators, and that his arguments for example in defence of cock-fighting as being the delight of the gentlest races in Asia and America and patently not making them cruel or barbarous,* or as being of such venerable antiquity,† are quite beside the mark. But then he will get into trouble if he rushes to the conclusion that any pain inflicted on animals for the sake of sport is cruelty, and he must learn to make the proper distinctions, and to accept what he is taught, though he may not understand the reasons. Thus it is wicked and cruel to be even a spectator of any combat between game cocks or dogs, or between dogs on the one side and a bear, a bull, perhaps also a badger on the other. But to set dogs to pursue and kill hares or foxes is quite lawful, provided only it be in the open. For if it be within an enclosed space the moral and legal complexion of the action is entirely changed, and from the noble art of coursing it is transformed

* The amiable and docile natives of the Philippine Islands are passionately fond, not only of music, but also of cock-fighting (W. G. Palgrave, *Cornhill Magazine*, Aug. 1878). This sport is the joy of the Malay peninsula and the Burmese except where the British authority forbids this wickedness and suggests opium-eating as a consoling substitute (cf. McNair, *Perak and the Malays*, pp. 265, 266; C. Forbes, *British Burma*, p. 157). Cock-fighting is very prevalent in Venezuela, where the working people are highly praised as light-hearted, sober, industrious and honest, and are moreover very fond of music (Spence, *Land of Bolivar*, pp. 37, 38, 223, 225). Much the same I think can be said of the lower classes of Guatemala; and again in Europe among the Balearic Islanders to whom I have several times referred, we find that cock-fights, as well as bull-fights and dog-fights, are common (Bidwell, *l.c.* pp. 166, 167).

† Cock-fighting was a popular amusement among the classical Athenians and quail-fighting among the Romans, as among the modern Chinese, who also ingeniously get diversion not only from birds but from insects, and take delight in cricket-fighting (Gray, *China*, I. pp. 392-394). Cock-fighting was for centuries very popular in England, the delight of schoolboys and the common people as well as their elders and betters, till the time came for the suppression of popular amusements. Some account of cock-fighting and references are given by Mr. Lecky, *Hist. of England*, I. pp. 550, 553, 554.

into cruel and illegal baiting. Thus also ducks must not be pursued by dogs in a ducking pond, or rabbits in an enclosed space. But with rats the matter is different, and to make their slaughter innocent, there is no need, I imagine, of their having previously had a run for life. It is cruel, even criminal, to wound or even over-tire certain animals under certain circumstances, and the lower orders have to be careful with their horses and cows, their cats and donkeys, lest these bring upon them fines and imprisonment. But it is lawful for sportsmen and even their rustic assistants to fatigue foxes, hares, deer, and winged game by their pursuit, and for riders in the hunting field or race course to fatigue their horses. And as a general principle it can be taken that you may wound without cruelty any wild animal and leave it wounded any length of time, provided always the wound be inflicted by some trap you have set or by some gun you have discharged. Also you may transfix certain animals with hooks and expose them a living prey as a bait to catch fish. And with the fish itself I am not aware that any dealings are cruel, though on this point as on others in this weighty department of law and morality a writer is sadly liable to mistake.*

It might indeed occur to some that charity begins at home ; that greater gentleness is due—perhaps to the pigeons and pigs, but certainly to the poorer classes of our fellowmen ; and that these should not be judged rashly, called brutal and cruel, and cast into prison for amusements they see no harm in, and which seem to them (perhaps not only to them) to have much the same character as some of the favourite amusements of the rich, with which no one (unless some eccentric vegetarian or envious radical) finds fault ; that to take delight

* The strange inconsistency of English law and public opinion on so-called cruelty to animals is well shewn by Mr. Jevons in an article in the *Fortnightly Review*, May, 1876. But it may be well questioned whether his standpoint is logical ; whether he is prepared to admit all the consequences of assimilating the irrational to the rational creature ; whether if we become dainty about sacrificing animals to men, we may not find ourselves sacrificing men to animals ; whether we are to submit to utilitarians lecturing us on right and wrong ; whether the happiness and morality of rich and poor may not be promoted by field sports and even certain combats of animals ; whether there are many better purposes than this happiness and this morality, that the brute creation can serve.

in the sufferings real or apparent of animals is one thing : to take delight in some sport or show, in the pursuit or capture of some wild creature, or in the trial of animal courage and strength, without regarding or thinking of the pain or its appearance, is quite another thing ; that uncouthness and roughness are not crime and cruelty ; that to prevent these last, it may be well to give to those natural infirmities the widest toleration.

§ 235. A few words may be here inserted on gambling, because this practice has been most frequently joined either to the house games described previously (§ 228) or to the contests just spoken of. It can indeed be attached to other recreations ; and it is curious that horseracing, now the great field for English gambling and for the congregation of bad characters, was once rather an athletic sport than a show, and was not made a means of profit or gambling till about the middle of the seventeenth century (Strutt, *Sports and Pastimes*, ed. Hone, pp. 44, 45), whereas cricket so excellent now, was once a means (as we have seen) of gambling and swindling. And plainly not merely the issue of a game or a contest, but any uncertain event can be made the foundation of a contract of hazard, and goods pass from one party to the other according to the result.

If a man for the sake of relaxation stakes property that is quite his own, without risking any sum that his family or his creditors may feel the loss of, and if he give no scandal by his conduct, and if by risking superfluities he exposes neither himself nor others to the temptation of risking necessities, and if he takes not unfair advantage of his opponent, nor unduly urges him to play, and by playing does not violate any just prohibition, he cannot be accused of gambling,* but only indulges in an innocent recreation, a mild and restorative excitement. But there is harm if any of these conditions are violated as they have been time out of mind from one end of the world to the other.

It would be long to give even a bare catalogue of the nations that have suffered from gambling, as the ancient

* That is, taking the word gambling to imply, as it does in common conversation, a wrongful hazarding of one's property. This is only a matter of words ; on the deed itself, *cf.* Gury, *Compend. Theol. moralis*, I. n. 946, 950, ed. Ratisbonae, 1868.

Germans so eager that when all else had failed they staked their own bodily liberty on a last and desperate throw (Tacitus, *Germania*, c. 24) ; or the modern Burmese where a man gambles away first his wealth and then (where the British authority does not extend) his children, his wife, and himself (Forbes, *British Burma*, pp. 138–143) ; or the Chinese whose small boys begin to gamble at the fruit-stalls (Gray, *China*, I. pp. 385 *seq.*) ; or to tell of the severe laws against gambling, like those of ancient Rome against dice-players ; or to reckon the misery and thefts and self-murders this vice has caused. Let us look to the United Kingdom. Here, although cards and billiards are used as means of gambling, horse-racing is pre-eminently the national means, and a moderate computation makes the annual sum lost and won by betting on races amount to eight million pounds.* Of these betting transactions I fear that in nine cases out of ten the conditions of a harmless game of chance are not fulfilled ; and the matter is made worse by our crooked public opinion and laws. We profess a pious horror of the gambling of our great-grandfathers and of the Continent ; we forbid lotteries and gaming tables† ; we inflict heavy fines upon the keeper of a betting house or betting agency : and

* This supposes that only some twenty times the amount of the stakes is betted on each race. (See *The Tablet*, 4 Feb. 1882.) An estimate is given in *Fraser's Magazine*, July, 1877, p. 84, that £10,000 a day changes hands 'at the post,' that is, by betting on the race-course, as distinct from club and chamber betting.

† It is difficult to comprehend how any one can swallow the camel of our betting-rings at home and strain at the gnat of lotteries abroad. I do not say that lotteries cannot be abused ; and in fact they have been abused curiously enough by that very Government which has received such support from our pious preachers against gambling, namely the Italian. Mr. Stamer (*Dolce Napoli*, pp. 80, 81) describes the vast traffic in Government lottery tickets at Naples, where in proportion to the population the lottery offices are "almost as numerous as public-houses in London and equally well frequented." The demoralizing effect in some of the country districts is noticed in the *Cornhill Magazine*, Dec. 1881, p. 693 ; also by Ouida, *A Village Commune*, I. pp. 380, 381.—English gambling in the epoch before horse-racing is described by Lecky, *History of England*, I. p. 522. The beginnings of the turf epoch towards the close of the eighteenth century can be traced in the pages of Strutt, *Sports and Pastimes*, 1801, Introduction, § 40, who mourns over the growth of gambling.

yet we not merely tolerate certain other places that are centres of betting, but openly honour them; and public journals of the highest repute gravely record without the shadow of an apology or the hint of an impropriety the betting that precedes every race; many even profess to give special information to help their readers to bet with success. But if gambling is wrong, this cannot be right; and when we think of the tricks of the turf, the lax code of honour and morality among its frequenters, even of noble blood, the fewness of those antique lovers of horses and sport who delight in horseracing without ever making a bet, we may begin to ask whether the use of horseracing has not been swallowed up in the abuse, whether it is not time that this temptation to gambling and dishonesty be removed, whether if our breed of horses did suffer—and this matter is disputed—such injury would be too heavy a price to pay for getting rid of so grave a scandal.*

Another scandal, characteristic of our age, is witnessed not in England only but also in the commercial cities of Europe and North America, namely market gambling or the so-called 'difference bargains' of speculators; that is when the parties to the contract stake their property on the market price at some fixed future time of some merchandise or security, and according as this price is higher or lower will have to pay or receive more or less. This betting on future market prices is distinct (though often not far removed)

* Two interesting articles entitled '*Legislation on Betting*' and '*An Exposition of Betting and Bookmaking*' were published in *Fraser's Magazine*, Nov. 1874 and July, 1877. The two great divisions of the betting world are the 'backers' who take the odds against a particular horse, and the 'bookmakers' who lay the odds against any horse soever. The law is very severe on the bookmakers under certain circumstances, but very lenient to the backers. This inequality indeed is not what is to be complained of, as the backers are more likely to be dupes and amateurs, the bookmakers to be professionals making a living by gambling; indeed many of the better class of these do make a very good living by this profession. What is foolish is to persecute bookmakers in one place and patronize them in another; and while forbidding ready-money betting, where the backer has to deposit his stakes, to give an encouragement to betting on credit, where nothing has to be paid till the fatal Monday that follows the race—a method obviously more conducive than ready-money betting to entice the youthful fool to his ruin.

from speculative purchases or *bond fide* agreements to purchase ; for although the form of the agreement be to deliver, respectively to receive, at a given price on a given day a given quantity of cotton at Liverpool, or iron at Glasgow, or hops at Southwark, or rye at Berlin, or gold at New York, or Government Stock, mining shares, or railway bonds at a given Stock Exchange or Bourse : the reality is that none of this merchandise or of these securities is ever delivered or ever meant to be, but only the difference paid between the price previously agreed and the actual market price. The connection of this betting with speculative purchases and the many combinations of the Stock Exchange need not now be considered ; it is enough to notice the great prevalence of this market gambling and the miserable frauds and swindling that throw all the iniquities of the turf into the shade. And although it seems possible for difference bargains to be an honest and exhilarating pastime, the probability of reckless gambling and the temptation to use dishonest means to affect the market price on the day of settlement, make us ask why such bargains are not utterly prohibited.

§ 236. The second kind of representation is the display of something marvellous, some wonderful sight, varying in dignity from the magnificence of mediæval pageants, and the illuminated dome of St. Peter's, and fireworks by the water side, to the tricks of the mountebank and the penny peepshow at a fair. Tumblers and dancers, jugglers and snake charmers, strange or strangely performing animals, giants male and female and dwarfs, are all marvels to behold ; we flock like our forefathers to see any strange beast, and there are some still who will not give a doit to relieve a lame beggar, and yet, as Trinculo complains in the play, will lay out ten to see a dead Indian. This class of recreation can indeed be abused, though we must not rashly condemn other countries or times or classes, who may witness in simplicity and without harm what for us to witness would be to gratify a morbid curiosity. But in any age it is an abuse where the main charm of some wonderful feat lies in the danger or seeming danger to the life of the performer, as when he walks on a tight rope stretched 100 feet from

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the ground, or puts his head into a lion's mouth. A worse and more wide-spread abuse has been the exhibition of immodest dances often in connection with musical or dramatic performances. The clergy had to fight against the mediaeval tumblers. India is polluted by dancing girls, whose presence, though they are notoriously immoral, is held to be requisite—a truly pagan custom—at family festivals. And public displays may serve impiety and sedition as when the pope and the king are burnt in effigy. But apart from such abuses there is great use in grotesque and ludicrous exhibitions—a sort of oil to the grating machinery of society and a safety-valve of merriment. And where there are friendly relations of classes, and Church and State exercise proper control, all sorts of exhibitions can be allowed and can be enjoyed with innocence, that in less happy circumstances will sink into occasions of vice and pass from Christian merry-making into Pagan Saturnalia.*

Music we have put as the third kind of representation ; and one of the problems of economical science is to determine the moral effects in every age, and country, and circumstance of musical recreation. I can but offer a few fragments, and will not attempt to consider those who have much wealth and leisure, and whether for them the love of music, and the progress of the art, and the presence of the best musicians with the best instruments, have much effect on their moral life, and if so, what kind of effect and how much. Among the lower classes in some countries there is great opportunity for hearing good music, and we may be sure that were the sweet melody hushed, the sounds of quarrelling and drunkenness would be heard more often. In Venezuela the working people are passionately fond of music ; they crowd to the opera and after the performance of a new piece they can generally play from memory a good deal of it upon their native instruments, and that too with tolerable accuracy

* Strutt, *Sports and Pastimes*, Book IV. ch. III., gives some account of mediaeval festivals and pageants, but without—it could hardly be expected in the dark age of historical science in which he lived—any due appreciation of them. Thus the old English Investment of the Boy Bishop seems to have been a delightful and innocent diversion entirely distinct from the abuses of the Festival of Fools.

(J. M. Spence, *Land of Bolivar*, I. p. 225). And in many towns of the European continent the artisans have the opportunity of hearing the open-air concerts given by an orchestra in some public place. In England it is otherwise. The Italian organ-grinders who penetrate to the back courts of our cities, minister in a humble way to a great need, and deserve honour rather than persecution and scorn. But the musical recreation of our poorer classes is mostly taken in places called music halls, of which Mr. Jevons (*Contemporary Rev.* Oct. 1878, Vol. 33, p. 500) says: "The sacred name of music is defiled in its application to them. It passes the art of language to describe the mixture of inane songs, of senseless burlesques, of sensational acrobatic tricks, which make the staple of a music hall entertainment." And, alas! their morality is still worse than their melody, so that the love of music is made a means of fostering instead of hindering vice.* And this is all the more lamentable because in our crowded towns for the manual workers who need amusement that can be taken in repose and that gives a certain excitement without injurious reaction, innocent music seems the most fitting recreation, and will undoubtedly attract them if only it is not exposed to the disastrous competition of music mingled with obscenity. To provide the one and to suppress the other does not seem to me, I confess, an Herculean task. Experience has shewn that tens of thousands will flock on a Sunday (the only day they have leisure) to hear good music performed by bands in the parks.† But even this elementary

* Mr. James Greenwood having visited every music hall in London found not one that was not a haunt of prostitutes (*Seven Curses of London*, 1869, p. 315, etc.). But London is better than Paris, and the music halls are decent compared with the places called *cafés-concerts* where the workmen assemble and listen to disgusting songs, greeting them with loud applause. (O d'Haussonville, in the *Revue des deux mondes*, 1 Oct. 1881, pp. 639-641.)

† Mr. Romanes, *Nineteenth Century*, Sept. 1879, p. 411, notices the astonishing success of Sunday bands wherever they have been tried; for example the Sunday visitors to Kensington Gardens increased in one day from some 7,000 to 80,000; and in the Regent's Park in one afternoon some 190,000 persons were attracted by bands. He is justly indignant at the sacrifice of the health, happiness, and morals of the many to the puritanical spirit of the few. Mr. Jevons (*Cont. Rev.* Oct. 1878, pp. 503 seq.) urges music as the best means of popular recreation, and especially

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provision of wholesome recreation, namely, at public expense (perhaps at one halfpenny a year for each of us) to provide on the afternoon of every Sunday in the fine season a good band in every public park, is forbidden by the heretical private judgment of the dominant class.

§ 237. There is still another kind of representation for us to consider, namely, the drama, or acting, or the play ; and this is representation by pre-eminence, and as it were the characteristic recreation of man. A love of it seems (as Sir Walter Scott marked) inherent in our nature ; to assume a fictitious character is one of the earliest sports of children ; and acting is found among rude as well as among polished nations, in rustic villages as well as in towns, exercising a wonderful influence and fascination. The drama is a sign of man's life on the verge of the two worlds of the sensible and ideal, and of how the present is in no small part a figure of what is to come. It is an image of the world, and thus has called forth both the highest efforts of genius and innumerable compositions of folly and dulness, and has varied from being the noblest of recreations hardly distinct from divine worship, to being of all the most infamous. Here then, if anywhere, there is need of making the right distinctions, and we should be very wrong to follow the Puritans and Methodists and still more inexcusable Jansenists, and denounce all plays and acting as pomps of the devil, instead of recognizing from reason and history that the drama is neither of necessity good nor of necessity bad, but according to circumstances may be either.

That it has often been bad is better known than how bad. The worst example in the history of Europe is that of the Latin and Greek stage, because of the virulence, the prevalence, and the duration of the evil. The theatre was a show room and school of immorality ; there was little to choose between an actress and a prostitute ; no decent man could be an actor. And then these theatrical abominations were not the diversion of a few idle profligates or of a corrupted court, but were part and parcel of Italo-Hellenic civilization. The

praises open-air concerts. He would have a local band and a small orchestra even in large villages. But he hopes too much. For men's morals need something more than the power of Orpheus to mend them.

passion for the theatre was universal and absorbing. Whole days were spent there ; we see a petty provincial town like Orange with a splendid theatre for 7,000 spectators ; the law considered attendance at the play one of the chief signs of domicile ; and besides the public theatre the rich enjoyed in their own houses the performances of their own actors, filling up the full measure of corruption. And all this lasted century after century ; and even when Christianity seemed to have prevailed, the lascivious drama long withstood the attacks of the clergy ; even the impious laws that forbade actors or actresses (*scaenici-ae*) to quit their abominable occupation were only after many hesitations and long delay repealed.*

Although this is the worst example, there are others bad enough, as the English stage in the latter half of the seventeenth century, the French in the latter half of the nineteenth. And I think we can venture on the generalization that the drama is ever liable and often likely to lapse into immorality and therefore needs the constant supervision of authority. The Greek stage sank from the moral heights of Aeschylus to the lowest possible depths. The religious plays which were fostered by the clergy in the early middle ages as an antidote to the mischief of the popular players, became in their turn in some places disfigured with impropriety. In China, where the theatre is a great amusement and where there is a grand historical-religious dramatic literature that deserves comparison with the Attic tragedies and the plays of Shakspeare (*cf.* J. F. Davis, *The Chinese*, 1840, Vol. II. pp. 177-193), we find the same diseased craving for garbage, and Mr. Gray (*China*, I. pp. 381, 382) gives us the edict of a Provincial Treasurer of Canton utterly prohibiting immoral plays and the appearance of women on the stage. The comic satires of the Hindu drama resemble, we are told, the Greek Comedy in their extreme indelicacy (H. H. Wilson, *The Theatre of the Hindus*, p. xxxi. 2nd ed. 1835).

§ 238. But the abuse does not take away the use ; and the fact that unguided actors will go astray, calls for their guidance but not for their expulsion. When the drama is under

* See the interesting account of the theatre by Paul Allard, *Les Esclaves Chrétiens*, Paris, 1876, pp. 424-441.

proper control it may be an excellent form of recreation, giving innocent enjoyment, occupying harmlessly the time that might else be spent in harm, and giving a fund of pleasant recollections and a store of wholesome images, and may serve as an excellent means of instruction, in particular by making the history and traditions of the nation familiar to the common people. But to go beyond this, to do more than indirectly favouring morality, to be a direct agent inciting to a virtuous life, is beyond the power, I will not say of the stage, but of the lay stage, though it have the genius of a Sophocles or a Shakspeare at its command. But the lower level is attainable, and those nations are fortunate who like the English and Spanish have a wholesome national drama, and are inexcusable if they fail to make use of it. The particular measures needed to make the drama innocuous depend on particular circumstances; and two general remarks may suffice. First if the livelihood of the actors depends wholly on the favour of the audience, and there are many rival companies and theatres, the temptation is great to entice an audience by pandering to depraved appetites. Secondly the difficulty of keeping the theatre from depravity is greatly increased by the admission of women to the stage. Of course it is possible to take precautions. The Spanish Cortes about the middle of the seventeenth century forbid any but married women to act, and bid the play begin not later than two o'clock in the winter and three in the summer (Karl Hase, *Miracle Plays*, transl. by Jackson, p. 268). And in the religious play at Oberammergau girls and women join in the performance without the shadow of a scandal, indeed with manifold advantage. Still if we look to the lay theatre and consider what happened to the later Greeks and Romans and what has happened to the European drama during the two or three centuries that have witnessed women on the stage, we may perhaps begin to suspect that the profession of actress might be dispensed with altogether, and that by keeping public acting as only a male employment, like the theatre of the ancient Greeks, and of the Chinese, and of mediaeval Europe, and of our own Shakspeare, our modern theatre would be none the worse.

We have yet to notice how the drama has been raised to be more than a harmless, wholesome, instructive recreation, and at times has become in the hands of the Christian clergy a powerful means of spreading piety among the bulk of the people. When the German poet Schiller spoke of the drama as a great moral agent, a school of charity and justice and practical wisdom, and when the Emperor Joseph II. dedicated the Royal Theatre of Vienna to the spread of good taste and the elevation of morals (Hase, *Miracle Plays*, pp. 189-191), these two votaries of shallow philosophy were wrong, not in the end they assigned as possible for the drama, but in thinking that end could be reached by mere laymen's means without the aid of the Christian Church. Authors (like Steele and Addison), actors (like Garrick), governments (like that of Louis XIV. or the ruler of Meiningen) can reform or help to reform the stage and correct its backslidings; but if it is to move our hearts to amendment it must be under the guidance of the priesthood. Let us look at a few facts.

§ 239. When the dark night of historical ignorance and falsification, of anti-Christian prejudice, of aesthetical depravity, began towards the middle of the nineteenth century a little to disperse, there appeared dimly visible a beautiful vision of the past, which, at least to all who have eyes to see, has since been growing more clear. The beauty was of two kinds, the one literary, the other moral. The religious dramas of Calderon, his *Autos Sacramentales*, were seen to be in the first rank of poetry: to make light of them was seen to be as absurd as it was of Hume and Voltaire to make light of the dramas of Shakspeare. Moreover various treasures of Christian dramatic literature, especially in French and Cymric, began to appear above the sea of oblivion. But I leave the more disputable matters of literature to which time will do justice; and look to what more concerns us, the moral picture of multitudes flocking to the theatre almost as to a pilgrimage, taking part as actors or auditors almost as if engaged in public worship, returning home instructed and amended almost as from a religious mission or retreat. So in the French religious theatre of the thirteenth century, the Breton of the fourteenth, the Spanish of the

seventeenth. And even in the nineteenth century when the rich and (as they say) educated Europeans had long sunk from such exalted recreation, it was found that among Christian peasants in many parts of the globe the religious drama had survived. A recent writer (in the *Cornhill Magazine*, Jan. 1878) notices how in the fourth decade of the century peasant plays were still not uncommon in Brittany. The actors and audience were peasants. The plays were in Breton rhyme, and were taken almost exclusively from Scripture, the lives of the Saints, or local historical legends; a few were founded on the tales of the Round Table and of Charlemagne. They were very long, one 'The life and death of St. Helen' taking six summer days from two o'clock in the afternoon till dusk; yet the actors never even faltered. The dresses, the stage and the scenery were of the roughest; there were no seats for the audience but the turf; and yet they would stand, men and women, attentive for hours. All the actors were males, and the morality of the play excellent.* A strikingly similar scene can be witnessed the other side of the globe among the natives of the Philippine Islands, where the Christian peasant drama survives. The plot (according to Mr. W. G. Palgrave in the *Cornhill Magazine*, August, 1878, pp. 171, 172) is generally an adaptation of some biblical story; sometimes it is taken from Hagiology or from semi-historical records. There is abundance of musical accompaniment; the dialogue is commonly in verse; a prompter is in mid-stage. The play is never shorter than three hours, and sometimes lasts three nights; but no one seems to tire. An invariable adjunct is a quaintly attired buffoon [the *gracioso* of the Spanish stage] who comes in from time to time and addresses or mimics the actors;

* In the play described by the writer from an unpublished French translation there is a scene in which there is opportunity for ribaldry, and yet, he notices, there is scarcely a word of offence. "The absence of vicious intention is noticeable; such coarseness as there is (and there is very little) being of a blunt, simple kind, arising solely from the nature of the case, and by no means from the author's ingenuity" (*l. c.* p. 85). It is, I may add, one of the first requisites of a proper understanding of the history of the drama (and of much else) to distinguish the plain speaking of *sancta simplicitas* from depraved and intentional impropriety.

he is rarely coarse in his licence and never indecent. Female characters are mostly, as on the old English stage, lads in female dress. Among the Christian peasantry of the South of India the same effect has been produced by the same cause, and every year at Atticodou in the Vicariate-Apostolic of Coimbatore the play of the Three Kings is performed on the Feast of the Epiphany before several thousand spectators. When the actors are assembled a priest who sits on the stage gives his blessing, and the chief of the village explains the moral of the play. The struggle of error against truth is set forth, and part of the play is a chaunted dialogue between Herod who is made the champion of Brahmanism and the Magi who are the champions of Christianity. The acting is rendered more expressive by the Tamul music that accompanies it. A comic interlude of a decrepit and ridiculous Brahmin awakens the drowsy, and is no more discordant with the general gravity of the piece than the comic scenes in the tragedies of Shakspeare. The play lasts through the night and when ended at daybreak a hymn is sung by the actors in honour of the Infant Redeemer, and then they go straight to the church and hear mass (*Annals of the Propagation of the Faith*, Jan. 1881, p. 16-19). Analogous mysteries or miracle plays are yet to be seen in the German highlands of Austria and Bavaria, and the Passion Play at Oberammergau is so well known as not to need description. But it may be noted that the spirit which enables that great religious play to be acted every tenth year is kept in vigour during the intervals by the performance of sacred and chivalrous plays in a small theatre in the schoolhouse ; and thus acting is part of the life of the villagers, and when the great Passion Play comes round some 500 persons, from grey-headed patriarchs to children of three years old, every one of them natives of the place, are able to appear on that noble stage.

§ 240. These examples enable us better to comprehend the benefit of the Christian drama which prevailed in various forms and lasted through many centuries. In several countries, if not all, this Christian drama arose out of the liturgy of the Church, and in some ways (though in some only) was like the growth of the Greek tragedy from the lyrical poetry of

religious worship. The clergy and their scholars in the episcopal and monastic schools were the authors and actors of the earlier dramas. Sometimes as in France and Germany these began with being in Latin and gradually passed into being in the vulgar tongue. Sometimes where a national pagan drama was in existence as in Cornwall, the clergy substituted a drama that was indeed national but also Christian. In judging of the influence and character of religious plays we must not think they were all alike or draw a fancy picture of perfection. Occasionally they were accompanied with abuses; sometimes they were not above the level of a good lay representation and gave amusement but not edification; but in the main they may be taken to have directly promoted a better life among those who took part in them, and sometimes the Church bestowed spiritual favours on both actors and audience. Their literary merit is not to be taken as any measure of their moral effect; and a prosaic French or English Morality of the fifteenth century may have delighted and edified the audience as much as if they had been Spaniards two centuries later listening to an exquisite *auto* of Calderon. The benefit of great works of literature belong rather to posterity and to the literary classes; and an economist if he sees a joyful and eager crowd delighting in a play that is conducive to faith and morals, ought to be content, whatever the failings of art in its composition or performance.

The decay of religious plays in one place after another is a sad chapter in the history of recreation, of popular culture, and of religion. Sometimes the plays fell before the persecutors of the Catholic religion, as when those of Wales were suppressed by Henry VIII., and the very documents by an odious act of Vandalism were burnt. One of their worst enemies was the ignorant pedantry that fettered most of Europe for centuries, and lacking both rational criticism and historical science, set up a standard of what was supposed to be classical good taste for literature and art, fondly thinking it was making a copy of the Greeks and Romans, not a caricature. The religious plays as well as the rest of mediaeval literature fared no better than mediaeval art and architecture and received the same ignorant contempt. The upper

classes forsook the miracle plays; and though in Spain they were still general in the middle of the seventeenth century and had been raised to the height of perfection, even there they fell at last into contempt among the rich, and were given over to mean boors who neither spoke French nor wore periwigs. The English miracle plays received their final blow from the Puritans, who passed a law in 1647 forbidding all stage plays; but in Cornwall for many years later the amphitheatres of turf and granite under the open sky with the sea close at hand still sounded with the echoes of the mediaeval mysteries. Among Catholic countries in the eighteenth century the blighting spirit of Jansenism was inimical to religious plays; thus their public representation was forbidden in 1765 by Charles III. of Spain, one of the gang of royal conspirators against the Jesuits. But the peasants were slow to abandon them till in the present century with the spread of railways and newspapers the process of decay was accelerated, and at present the religious or semi-religious peasant plays are throughout Europe becoming rapidly extinct (*Cornhill Magazine*, Jan. 1878, p. 76).*

* Many of the numerous works relating to the Christian drama are mentioned in the editor's preface to Karl Hase, *Miracle plays and sacred dramas*, London, 1880. The book itself, being antiquated (it was published in 1858) and prejudiced, was hardly worthy of translation, though it has gained much by the excellent notes of the editor the Rev. W. W. Jackson. Pleasanter reading is the volume by Denis Florence MacCarthy, *Mysteries of Corpus Christi*, Dublin, 1867, containing translations from Calderon, and the essays of Franz Lorinser and Pedroso. An admirable study on the Keltic theatre is prefixed by Viscount Hersart de la Villemarqué to his edition of the Breton Play called (in French) *Le Grand Mystère de Jésus*, Paris, 1865. See also Marius Sepet, *Le Drame Chrétien au Moyen Age*, Paris, 1878. Some information can be obtained from the beginning of A. W. Ward's *History of Dramatic Literature*, London, 1875, though, as I have already observed, literary merit is not to be taken as a test of the importance of these plays. And this is peculiarly the case in England where of all the plays acted in village, market town, and city before Henry VIII., the words of only three or four seem to have escaped the cruel hands of heretical destroyers.—Perhaps the German work begun to be published in 1880 at Wolfenbüttel by Gustav Milchsack, *Die Oster, und Passionsspiele*, may be a good source of information; but the form of the book would hardly attract any one but a hardy student. I have looked at it, not read it. Milchsack mentions a Greek book by Sathas, published at Venice in

Are we then to give up these plays, and to say that their lingering remnants are a mediaeval survival, and that any attempt to revive them would be an anachronism? For saying this there is some but only a shallow foundation. It is quite true that the religious plays among peasantry have rapidly died out in this century. It is true also that the immediate causes, apart from the decay of religion, have been the railways, and newspapers, and other means by which the country folk have been brought into closer contact with the townsfolk, and have lost their special dress, and manners and customs, the pious plays among them. A peasantry is a conservative agency, not creative, and thus they may indeed when left alone preserve almost indefinitely old habits, whether good or bad; but they cannot by themselves recover what they have once lost. This, however, is only a reason against the peasants by themselves reviving the miracle play, and no reason against its revival by the rich and cultivated. Then the very means of communication, the railways and printing press, that once favoured its destruction, may be used for its propagation, and the country villages may receive from the towns no longer corruption but reformation. Of course there are many who think religious plays ridiculous, and historical and national plays tiresome, and who sigh after the fleshpots of Egypt, some *opéra bouffe* by Offenbach or the latest *pièce risquée* from Paris. But for such I am not writing. To others I would say that the deep springs of religion are still flowing inexhaustibly, and we have but to draw from their abundance. The old Christian drama came from the clergy and their scholars: the Christian clergy, regular and secular, have in our own day, in many countries, schools and scholars not inferior to those of old, and each of these schools may be a nursery of a new Christian drama no whit inferior to the old. There is nothing in the nature of things why clergy and laity, learned and unlearned, rich and poor, young and old, should not once more be united at the religious play, and, as each chief holiday comes round, take part as actors or auditors in this most excellent recreation.

1879 on the Byzantine drama and music, on which some intelligent criticism would be welcome.

CHAPTER XI.

HEALTH, JUSTICE, AND MORALITY.

Items of Medical Expenditure, § 241—Medical Service of the Poor, § 242—What is to be reckoned as Expenditure on Justice, § 243, 244—Amount of it, § 245—The Clergy and Public Worship, § 246—The Service of the Dead, § 247, 248—The Service of the Poor, § 249—Moral and Intellectual Culture, § 250, 251.

§ 241. In this chapter we have to consider the chief remaining heads of enjoyment, which perhaps can be reduced to three, and called respectively health, justice, and morality. The main treatment indeed of these grave matters I leave alone, partly from want of information, partly because much of it does not belong to Economics, partly because some of it will be better placed in a subsequent Book. Here we will regard health, justice, and morality chiefly in their aspect of being the occasion of expenditure.

The heaviest items of expenditure on health are likely in any thickly peopled country to consist of payments to physicians, surgeons, midwives, and nurses. But among remote settlers such payments may be altogether absent; for although they cannot, any more than others, do without the arts of surgery and midwifery, a rough and ready acquaintance with these arts may be common among them; and where the men in each household, or from the nearest neighbour's in the backwoods, act, when the need comes, as surgeons, the elder women as midwives, the mutual good offices can be cancelled without any payment. But the advantage of greater skill through special training and constant practice are conspicuous in medicine and surgery, and we may thus expect, wherever circumstances permit, to find a special class of practitioners, who must be paid by some one

for their services. The same may be said of midwives, and in a lesser degree of nurses. Naturally the increase of payment does not of necessity mean increase of cost. The time a family spent in doing, and doing inefficiently, its own doctoring and nursing is now vacant, the labour saved; and the greater leisure and better health may enable them to gain an increase of revenue that may far more than cover the increase of expenditure caused by payments to the professional doctor and nurse.

Drugs and ointments, and various surgical appliances form another series of expenses on health. In England they appear to be much greater than they really are, because there is a custom of partly paying the skilled and valuable labour of doctors, surgeons, and in particular, chemists, in the shape of a very high money price for drugs and instruments.

A third item of expenditure is that caused by temporary change of residence, in particular by frequenting medicinal baths and warm regions in the winter. The nature of such expenditure I have already spoken of (§ 223). The amount may be very great, as it must be among Europeans, witness the numbers who frequent the German baths and pass the winter in the South. Naturally we must distinguish the melancholy transit and sojourn of the sick from the recreation of travelling, and the use of watering places as a resort of fashion and pleasure (*sup.* § 189, 223). Otherwise we should charge to the account of medicine large sums really spent on recreation. The distinction indeed of these two kinds of expenditure is often confused; and between the avowed pleasure seeker and the genuine invalid are many intermediate classes. Hence any accurate calculation of this third head of medical expenditure is very difficult.

§ 242: There are many delicate questions connected with medical service. The position of medical men is one both of trust and authority, because of the access they have to the inmost recesses of the home; because of their knowledge, where their art has been developed, of much that is inaccessible to the vast majority of their patients; because of the willingness of these patients to pay almost anything in order to escape sickness and death. There is need of an adequate and regulated remuneration for medical men, and due

honour, and *esprit de corps*, and the public opinion of their fellows. There is need of suppressing quack doctors and those who use their skill to minister to crime and immorality. But I will leave all these points,* and only add a few words on the medical service of the poorer classes.

Le Play, an excellent observer, tells us (*Les Ouvriers Européens*, I. p. 366-371) of the prevalence in many regions of Europe of empirical doctors who are not to be confused with charlatans, and who are by no means unsuccessful in the treatment of the prevailing illnesses of the locality, learning not a little from local tradition and perhaps, as shepherds or herdsmen, from their own experience with the diseases of animals. Sometimes rural landowners and employers provide efficient and scientific medical service. Thus the hospitals in some of the mines of Siberia are not inferior to those of London or Paris. In some of the communes of the North of Spain all the inhabitants club together and pay a medical man, who then without further charge attends to any of them who fall sick. Sometimes the country people are helped by private charity, sometimes by the local or central Government. Thus the Swedish Government pays a doctor to visit the remote settlers in Lapland (*Fortnightly Review*, Dec. 1876, p. 699). But it is pre-eminently in the large towns that the lower classes have had the expenses of their medical service defrayed by public or charitable funds, and in particular can make use of numerous houses for the reception of the sick. In the miserable circumstances of many of our large towns this method of help may be suitable; but there is possible mischief attached to it that may make us wish for a change. For first, one of the firmest bonds of family life may be weakened, namely, the personal care for sick members; and to send off quickly a sick relative to an hospital or infirmary, there to be treated without expense or trouble to his family, is an action no doubt medically very remote from leaving him (as some brutal savages do) without medicine or nursing, but may not be very remote morally. And though

* There is, I believe, an interesting Report on medical organisation in the *Parliamentary Papers* for 1882. The question of female doctors for women is important, where circumstances or sentiments stand in the way of male doctors attending women.

a poor family may indeed be excused on the plea that there is no one at home to act as nurse and no room to be nursed in, the ruling classes cannot be excused where they suffer such deficient homes to be common. And secondly, one of the most natural and enduring links between masters and workpeople is broken when the care of the master and his family for all the sick and disabled workpeople, can be abandoned, as it can under these circumstances, without any violent shock to the feelings of natural compassion. Thirdly, by the exemption of urban workpeople and employers from the trouble and expense of tending the sick, while there is no such exemption in the country, the concentration of manufactures and commerce in towns is fostered.

But let us leave this matter as it will come before us again in the next Book when we are looking at the relations of master and servant and the various historical forms they have assumed. And again in the Fourth Book on Economical Maladies we shall have to consider the great army of suffering, the poor who are also stricken with disease, or infirmity, or wounds, and the significance of this woeful crowd and the modes of treating the evil, and what conclusions concerning philosophies and religions can be drawn from the facts.

§ 243. Justice is not to be got for nothing any more than health ; and government which exists for the sake of justice, that is, for making clear and making secure men's rights, cannot fulfil its purpose without cost which some one must bear. How to reduce such cost to the lowest limit without causing the neglect of any duty of Government, and how to apportion the burden fairly on the members of the State, are two of the main problems of Politics. Here it is sufficient to say a few words on the mode of reckoning the burden.

First, it is plain where taxes are levied on expenditure—so-called taxes on commodities, some of what seems to be spent on food, or drink, or amusements is really spent on government. Of every hundred pounds, for example, that an Englishman spends on beer, brandy, carriages, and horses, a certain portion is spent in reality on the enjoyment of social order and justice.

Then, where much of the public revenue comes from Government property, we must not think that Government is

less costly. In Prussia more than a quarter, in Bavaria more than half of the public revenue is thus derived : in England only an insignificant fraction. How excellent a source of revenue this may be, we may in time have occasion to consider. Here it is sufficient to observe that if a government were wholly supported in this manner, the country would not be governed *gratis*, any more than if the government was wholly supported by taxation. The difference is not in the cost but in the mode of meeting it ; and whether revenue flow directly into the coffers of the government or flow first into the pockets of private citizens, an equal amount of the labour and property of the country is used, *ceteris paribus*, for the sake of justice ; and if by an impossible supposition no government was necessary, there would in both cases alike be an equal amount of labour that might be saved and of property that might be applied to other purposes.

Again, we must not think government 'cheaper' where much is done by compulsory service. The government may avoid paying : it cannot avoid cost. It may say the horsemen in the cavalry must provide their own horses : not one horse the less has to be used in the campaign. It may compel unpaid service on juries : the judicial work to be done remains precisely the same. For the government directly to take the goods and enforce the labour required for purposes of State may at one time be the best policy, while at another time it may be best to procure them indirectly by first raising money by taxation and then hiring servants and buying goods : but there is no necessary difference in the cost.

Further, we must not think the cost of government is limited to that of the central authority. For many important departments of making rights secure and clear may be distributed among local authorities. Thus in feudal political constitutions a mere trifle may be spent on a military force by the central authority, because the cost is borne by a number of local chieftains ; but there is cost ; and it is not of necessity any less than when there is a large army wholly paid and controlled by the central authority.

§ 244. Again in some societies the government pays but a small proportion of the expense of private justice ; and

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instead of legal charges only falling on convicted criminals and on those who bring captious and frivolous suits, heavy legal expenses may have to be incurred by innocent persons who are accused and by reasonable and genuine litigants in order to make their rights clear and secure. In England, for example, every possessor of a large property has a family solicitor to defend that property. Whether this should be so, and in what manner lawyers should be paid, are matters not now to the point. The point is that legal charges are payments for government. And thus the cost of defending one's broad acres by the skill of a solicitor is analogous to the cost of defending them by the strength of armed retainers: in both cases labour and property is applied to purposes of government; and again not only all stamp-duties on legal documents, but all payments to jurymen and witnesses, to officers of court, notaries, solicitors, counsel, are to be placed under the head of expenditure on government. For they are paid for ascertaining or enforcing rights (*cf. sup.* § 57).

On the other hand we must exclude from expenditure on government many payments, though made to public authorities. For the local or central authorities are able to and in fact do undertake many functions other than those of government; and therefore payments for such functions must not be put under the head of payments for the enjoyment of justice. Thus when a man pays his municipality for water or gas, or his central government for telegrams, letters, and travelling on State railways, he is paying for drink, or illumination, or transport, not for justice. But if any portion of the receipts from these sources of public revenue is applied to purposes of government, then indeed a part of what seems to be paid for getting water or sending letters is really paid for securing justice.

In some countries the authorities provide support for all the poor, and elementary or even secondary instruction for any who like to apply for it. When a man is called on to pay for this—in England in the shape of a poor rate and school-board rate—is his payment to be called expenditure on government or on works of charity, or not real expenditure at all, but mere transfer to the real owners of certain property

of theirs lodged in his hands? The last view seems to me the true one. The payer of these rates, let us say then, is not the owner of all he seems to be, but owns a part and is trustee of another part, having to hand over the proceeds to the real owners, namely, the poor and all parents not able to pay for school instruction of their children, or not ashamed to make other people pay for it. It might be a law that of all a man got possession of over £500 a year, he should hand over half to the poor of his neighbourhood. We need not ask whether such a law would be a blessing: what we have to ask is, how we are to call such transfers of property? It seems to me they would not be expenditure at all, but the distribution of the revenue of an estate among the co-proprietors. Now the payment of school board rates or poor rates, whether a good thing or a bad thing, seems to me to be much of the same character, and to be distribution or apportionment rather than expenditure.

§ 245. So much as to what is, and what is not, expenditure on government. And from the previous section it is plain that to calculate what is expended is no easy matter. Plenty of figures can be collected; but little can be collected from the figures. Thus there are recent returns that give the total receipts of central and local governments in Russia as something short of one pound a head: in France as over three pounds.* And we may assume that all the receipts are expended.† But these figures are useless till we know a great deal more than the figures tell us. We want to know what is got for this expenditure; how much is employed for other purposes than those of government, and must in consequence be deducted from the one pound or three pounds a

* See the summary from Parliamentary Papers in *The Times*, 25 Jan. 1882. Wurtemberg appears to raise about £1 8s. *od.* a head, Sweden about £1 9s. *od.*, Bavaria a little over £2, Spain about £2 6s. *od.*, Holland about £2 8s. *od.* In the United Kingdom in the two years 1874 and 1881 the amount of taxation a head was as follows: Imperial taxes respectively £2 7s. 7*d.* and £2 8s. 3*d.*; local taxes approximately £1 10s. *od.* and £2; total £3 17s. 7*d.* and £4 8s. 3*d.*

† This is of course no necessity. A Government may for example hoard some of the gold and silver received as taxes, or may keep as government property land obtained by forfeiture or escheat.

head* ; how much on the other hand must be added for expenditure on government not included in these figures, whether for example much of the expenses of litigation are included or not ; what proportion the apparent expenditure bears to the real cost of government, whether for example much private property is used or taken for government purposes without payment, as when private carts and horses are requisitioned and soldiers lodged in private houses, and whether much task work is imposed on private citizens in the shape of unpaid military or judicial service. And when all this had been examined we should yet be unable to make a proper comparison between the cost of government in the two countries till we had examined the conditions of life, and the aggregate wealth, and the distribution of wealth in each, and seen whether money payments were enforced where they were odious and injurious, instead of payments in kind or task-work ; and conversely ; again, whether foolish taxes were imposed creating an army of smugglers and another army of custom-house officers ; whether the cost of government pressed harder than was just on the poor and the weak, and a hundred other things outside the philosophy of the ready-reckoner and his financial statistics. For cost is indeed not a matter of figures (*sup.* § 55).

Besides folly and injustice in distributing the burdens of government, there has often been excess in the total amount levied because the amount has had to support extravagant courts (as of Nero and Ismail Pasha), or unjust wars and vast military establishments (as at Rome during the last two centuries of the Republic, and in modern Europe), or an undue number of lawyers (as in England, France and British-India) or a parasitic bureaucracy (as perhaps in Byzantium in the 11th century, and in modern Greece). And not merely families and classes may suffer misery by undue cost of government, but whole countries become impoverished

* In both the countries mentioned and in many others a large item of public expenditure is the payment of interest on a national debt. This item must, it seems to me, be deducted from the apparent expenditure on government : it is not expenditure but apportionment ; the expenditure was made long ago in the weeks or months that followed the government loan ; now all the government has to do is to hand over to the bondholders not *its* property but *their* property.

and depopulated. It is indeed conceivable that too little labour and property may be sacrificed for the sake of government; this may have happened perhaps at one time in the United States. But it is much more likely that the too little is only in one department of expenditure, and that there is too much in others: deficiency for example in adequate police, allowing free play to cheating, theft, and assaults; or, again, by a beggarly economy only keeping a quite insufficient staff of inspectors of factories and mines, and at the same time wasting millions on unjust or useless wars, on schooling for those who could pay for it, on the senseless systems of imprisoning convicts; or, again, as in Italy, while ten times too much is spent on the army because ten times too numerous, too little may be spent to lessen the hardships of each miserable conscript. But I must not trespass upon Politics.

§ 246. The enjoyment of religion and morality gives rise to various items of expenditure which may perhaps be divided with convenience into the five heads of the support of the clergy, the ritual of public worship, the service of the dead, the service of the poor, and the instruction of youth: in all of which a striking diversity is to be observed between different periods and countries, and again between different classes in the same time and same country.

First in regard to clergy of all kinds the expenditure on their support will vary according to their number, their requirements, and their property. For example in England and Ireland the Catholics have to pay no small sum for their clergy although these are frugal and few, because they are mainly without private means or endowments; whereas the clergy of the State Church require little support because in the main they are amply endowed. But the Protestants in these countries spend far more than the Catholics in paying missionary clergy, partly because they send out more missionaries, but partly also because on an average each missionary costs far more to send, needing an outfit for comfort and security, often for the comfort and security of wife and children; whereas the Catholic missionary, celibate and ascetic, goes out with not much more than his breviary and his crucifix. But I will say no more on the grave and delicate

matter of the payment of the clergy, except to notice that where payment is made them out of the proceeds of the taxes, there is as it were a mortgage held by the clergy upon all the property in the country, and no owner is to reckon up his revenue till he has deducted the share he has to pay of the interest of this mortgage. In France and Germany the payments by the State to the Catholic clergy are, I believe, a scanty dribble from the plunder of Church property; and the clergy because they are so paid are no more to be looked on as servants or officials of the State than are the holders of French or German Government Stock, and only differ from these bondholders in their right to be paid being ten times better founded.

Secondly in regard to the sums spent on the ritual of public worship, compare the outlay of the English workman in the reign say of Henry III. when he took his share in the magnificent expenditure on sculptured cathedrals with painted walls and windows, gorgeous vestments, banners, and hangings, church plate of precious metals studded with precious stones, and the repeated consumption of costly incense and innumerable waxen candles: with the modern English workman, who perhaps never pays one farthing towards any form of public worship, or the Chinese, who with more decency, makes a sort of compromise, and piously consumes in sacrifice not indeed actual ingots of gold and silver, but their effigies in paper.

One form of public worship is the practice of pilgrimages so conspicuous among Christians and Mahometans, and which if the shrine is distant may cause considerable expenditure.

It may be noticed that the two previous heads of moral expenditure are no necessary indication of the wealth of those who contribute. Thus the Irish while suffering for centuries the extremities of poverty and tyranny nevertheless sustained their clergy; and to this day the Neapolitan peasantry, though bowed down by economical and political oppression, still make their generosity triumph over their poverty, and to the disgust of an unchristian observer spend thousands of *lire* in the poorest commune on the festival of the patron saint or on the fabric of the church (L. Franchetti, *Province Napolitane*, 1875, p. 20).

§ 247. The service of the dead, the decent laying out of

the body and then with appropriate solemnity bearing it forth and laying it in a seemly tomb, with prayers for the departed soul, and further, lest the memory of the dead grow faint or the charitable prayers and works of the living grow slack, the institution of pious anniversaries: are duties that the Christian Church, from her view of life and death, of the body and the soul, expects from her children. But outside the Christian pale there is danger on the one side of brutal and irreverent treatment of the dead, as though men were dogs, and their corpses mere refuse to be thrown away or turned to account,* and on the other side the danger of costly and burdensome observances the outcome of perverted fashion or superstition. Of the latter abuse a notable instance is to be seen in the picture of the Egyptians under the Ptolemies recently made known to us (*The Times* 24 Dec. 1881, and 9 Jan. 1882). A large body of tradesmen were employed in embalming the dead and a large body of priests, whose dealings were not far removed from those of tradesmen, were occupied with funeral and memorial services, and used to bequeath, to sell, or to mortgage their lucrative obligations. At Athens a sumptuary law of Solon was directed against the sacrifices, the lamentations, and the banquets at funerals. At Rome the Twelve Tables sought to check extravagance in the incense burnt before the corpse, in the crowns and garments that adorned it, in the number of the musicians, in the construction of the funeral pile, in the sprinkling of the ashes, in the funeral feast, in the objects placed together with the corpse in the grave or on the pyre. The splendour of the funerals and the tombs of the rich Romans of the later Republic and of the Empire would require many pages to describe (See J. Marquardt, *Das Privatleben der Römer*, 1879, pp. 330–372). They indulged the costly inclination to burn or bury with the deceased valuable articles of his property, as arms and horses, a habit of which a striking example has recently been found among another people in very different circumstances. I speak of the Northmen of the ninth century and the great sea captain recently found buried with his twelve horses, his hounds, his

* So we are told—I will not give any reference—that the Siemens process of cremation if generally employed would leave a quantity of bone earth equal in value to the bones which, chiefly for manure, are imported into this country.

peacock, with arms and golden treasures, above all with his great war-ship all complete and fitted.* In China there is great expenditure on coffins, on funeral offerings, and above all on tombs, which for the higher ranks are of great magnificence (Gray, *China*, ch. XII.). If funds are wanting for the obsequies, "houses and land are sometimes mortgaged or sold; and there are not a few instances on record of men selling themselves as slaves to obtain the means of duly celebrating the obsequies of father or mother" (*ibid.* p. 316). In some of the States of Germany sumptuary laws concerning funeral expenditure were issued as late as the years 1777, 1783, and 1784 (Roscher, *Nationalökonomie*, 10th ed. § 234, note 3). And certainly whenever the customary expenditure on funerals is excessive and burdensome, each family of mourners is by itself helpless to reform the evil; and a civil or ecclesiastical sumptuary law may be the best method of checking this vain expenditure and enabling the dead to be buried with simplicity and yet with reverence.

§ 248. The treatment of the dead may be such as to endanger the health of the living, and this, the medical aspect of the case, has received in our own day much attention. Air or water may be polluted if graves are shallow and crowded thickly together in an unsuitable soil in the centre of a populous neighbourhood close to the sources of a water supply, or if devices such as metal coffins and brick graves delay the return of the body to the earth. And in exceptional circumstances as on a battle-field or in an epidemic simple burial may be dangerous and the aid of fire or quicklime required to destroy the accumulation of the dead. But in ordinary circumstances reason, while condemning the abuses of burial just spoken of, seems strongly to urge its use as the normal mode of treating the dead for all countries: for the sake of health, because the earth is the best depurative; for the sake of justice, because evidence can be gained from the examination of the buried remains; for the sake of natural religion, because the belief in immortality is in this way least tried; whereas if cremation prevails, miasma is to be apprehended, and the marks of poison or violence are

* See N. Nicolaysen, *The Viking-Ship discovered at Gokstad in Norway*, reviewed in *The Academy*, 17 June, 1882.

effaced, and the dead man seems to the vulgar to be dissolved into vapour, and annihilated ; while certain other methods, as the Parsee towers of silence on which the dead are exposed that the skeleton may be clean stripped by vultures, or the simple exposure of the body to dogs and wild beasts, or casting it into the sea, or, again, into a stream to sink in the mud or be devoured by crocodiles, are plainly inapplicable, apart from other objections, to populous regions where there are no ravenous beasts to help the work. The matter indeed is not simply one of reason for the philosopher, the jurist, the economist and the physician to settle between them : positive religion is concerned with it ; and in fact Christianity waged war on cremation, and cremation is valuable to its modern supporters for the most part, I take it, not as checking the spread of disease, but as fostering the spread of irreligion.*

§ 249. The fourth head of expenditure for moral or religious ends is the service of the poor, or charity in its wide sense, including not merely gifts to the poor by the rich, but all gifts, except those between personal friends or members of one household, or such as are mere part of feasting and merrymaking, or of the nature of bribes, blackmail, or hush money. Charitable expenditure has differed much at different times in character and amount. An impulsive and unreflecting hospitality is seen in many rude and simple conditions of society, as among the Greeks of the Homeric Age, the Germans of Tacitus, the Highlanders of Scotland before 1745, and is full of charm. Still, it does not imply any high moral condition ; even the wandering beggar, who is so well received, has news or tales to tell and songs to sing, and is not so separated in manners from his hosts that his society is unpalatable. In such circumstances it is natural enough to say with Admetus in the play—

“ I know not how to thrust away
A stranger from my house and say
Aught but, Be honoured here, and stay.”†

* See the *Dublin Review*, July, 1876. Cf. an article in *The Times*, 15 Jan. 1879.

† Euripides, *Alcestis*, 582, 583 : τὰμὰ δ' ὄνκ' ἐπίσταται Μέλαιθρ' αποθεῖν, οὐδ' ἀτιμάζειν ξένους.

Though indeed even in these circumstances the maxim, Hold the stranger in reverence (εὐσέβει πρὸ ξένου, *ibid.* 1167), is not unconnected with religion. Again among the poor of London fellow lodgers and neighbours give help to each other, afflicted with common sufferings and witnessing hungry misery close at hand. Besides these gifts of compassion and impulse are those that spring from genuine motives of religion. Then there are the gifts of ostentation so conspicuous in modern England and China and in the Roman Empire under the early Cæsars ; moreover those due to superstitious fears or hopes, on which kind of almsgiving we can again point to China for examples (see Gray, *China*, Vol. II. ch. XVIII. and Vol. I. p. 261). Compulsory payments for the support of the poor are not gifts, and therefore must not be placed under the head of charitable expenditure ; nor, though in the shape of taxation, can they be considered as expenditure on government, but as already explained (*sup.* § 244) are rather the payment of a dividend to co-owners, or the annual interest of a mortgage held by the poor on the property of the rich ; and no owner is to reckon up his revenue till he has deducted the share he has to pay of this interest.

The amount of revenue assigned to charitable expenditure has naturally, the motives for it being so various, itself greatly varied independently of the necessities of the recipients. Le Play (*Les Ouvriers Européens*, I. pp. 354–358) notices the danger of the higher class of workmen and the lower middle class escaping the improvidence and intemperance of the lower class of workmen, only to fall into the worse vices of harshness and avarice. In truth, the less the prevalence of impulsive gifts, the more pressing the need of religious gifts. But these matters, and the miseries of ostentatious philanthropy and irreligious alms-giving, the glorious deeds of Christian charity, and much else, must be reserved for the Fourth Book of this work, where I hope to treat fully the whole question of charitable expenditure. That it is deserving of being treated in any survey of Economics is plain, if for no other reason, for this, that gigantic sums have been passing time out of mind and are still passing in divers forms of alms from one set of persons to another under the action of the three motives of ostentation, natural com-

passion and religion. To omit such potent factors in the distribution of property is inexcusable.

§ 250. It remains to speak of the instruction of youth. Professional education indeed (as it is called) and commercial and technical, do not concern us here. For we are only concerned with that instruction which has for its end the moral and intellectual culture of the pupil. It is true indeed that those other kinds of instruction often indirectly promote such culture; and this in its turn often indirectly promotes industrial capacity (*sup.* § 94). But just as the end of teaching the catechism and the classics is not to make the pupils more efficient surgeons, for example, or clerks, or blacksmiths, but upright and cultivated men: so also the end of teaching surgery, for example, or bookkeeping, or iron-working, is not to give the students or apprentices moral and intellectual culture, but to make them more efficient surgeons, or clerks, or blacksmiths. No doubt these two kinds of instruction are often mixed up in inextricable confusion; the same school and same teacher may serve for different kinds of instruction; the master of apprentices may look to their moral as well as their technical training. But it is part of economical science to distinguish what in practice is confused. It may be well enough for parents to put under one head all they spend on the training of their children; but the economist must look in each case to the end of the training, and according to these ends must make his classification of the expenditure. Thus all the labour and property used in teaching medicine must be put down in the national account as the cost, not of moral and intellectual training, but of health; again the cost of teaching gunnery and tactics, conveyancing and pleading, must be put down to the cost of government; that of teaching brick-making to the cost of bricks. But when instruction is not for any particular end—is not an apprenticeship to any particular art, but is for the general end of man—an apprenticeship to human life,* then the cost of it must be put down to the cost of enjoying religion and morality. The religion indeed may be perverted, the morality awry, or there may be an attempt to discard religion altogether and even morality:

* In other words when it is for the sake not of *ποιησις* but of *πᾶσις*. See *supra*, § 4 and Appendix A on Science and the Arts.

but though this affects very much the guilty or deluded people who thus abuse instruction, it does not affect the mode of reckoning the cost of this instruction. For whatever title is given it, its end is to prepare the pupils to fulfil the purpose of their life ; and though the errors as to this purpose be never so gross, the instruction for it is still to be placed under the means of enjoying religion and morality. It may be said I am taking liberties with language and forcing the enlightened teaching of liberal-minded laymen into the narrow limits of clerical nomenclature. But I suspect that those who take offence at this use of words, themselves take still greater liberties with facts.

Whatever the name we give to that instruction which has moral and intellectual culture as its end, the cost of it cannot be passed by ; for the amount of labour and property absorbed by it may be very great, as in China or Prussia, or in the England of the fifteenth century, or again in England since about the year 1870. Naturally we must not be deceived by instruction being given *gratis* in endowed, or charitable, or government schools. Such arrangements may be good or bad ; but in themselves they do not affect the cost of instruction. What they affect is the manner in which that cost is borne. Already I have explained (*sup.* § 224) how the sums spent by government on schools are to be deducted from the property of all who do not use them and added to the property of all who do. On the other hand voluntary contributions by the rich to the schools of the poor are genuine expenditure, as well as all that is paid by rich or poor parents for the so-called liberal education or elementary instruction of their own, not of other people's, children. Naturally expenditure is not to be confused with cost. Circumstances may greatly enhance or greatly reduce the salaries of teachers and the expenditure of parents on having their children taught ; the toil and trouble of teaching is not altered. Various orders of the Christian clergy have set to work century after century to teach the poor without payment : they have not got rid of the cost of teaching : what they have done is to forego remuneration, and thus prevent as far as possible any burden falling on any shoulders but their own.

§ 251. A multitude of other matters connected with instruction I will pass by. Certain kinds of knowledge can be made the one channel, as in China, to political advancement, and no monopoly of the rich. In other countries an almost impassable wall may separate the scholar and the gentleman from the crowd untinctured, as they say, with polite learning, the *profanum vulgus* of an Augustan age. Elsewhere many branches of learning may be held as a mysterious secret by a powerful caste. Or two kinds of culture may exist side by side as in medieval Western Europe, where on a common basis of religion arose two edifices of culture, one the chivalric education, with the three degrees of page, squire, and knight, and various graceful accomplishments of body and mind; the other, scholastic education, built up of the seven liberal arts, and intended to arrange all knowledge in its place in one organized whole. And this second edifice of encyclopaedic knowledge was in the main open to the poorest, not in theory only but in practice; nor is Adam Smith far wrong in his remark, though he fails to appreciate the cause and significance of the fact, that "before the invention of the art of printing, a scholar and a beggar seem to have been terms very nearly synonymous" (*Wealth of Nations*, Bk. I. ch. X. p. 61, ed. McCulloch). But we can leave these matters as we shall have to revert to them again when, in considering the various organizations of family life, we look at education, of which instruction is naturally a part. And in that place therefore can be said what may be needful on the art of teaching and the office of the schoolmaster, matters that for many years past have given occasion to a great abundance of words and a great display of folly.

And now, having in some way taken a survey of the preparation of wealth (Ch. II.-V.) and of its enjoyment, as well as the chief heads of domestic expenditure which the enjoyment of wealth and of other goods renders needful (Ch. VI.-XI.), we are in a position to face some of the problems concerning national wealth.* Of course the

* It may be said that I have omitted several important items of expenditure, on servants, on the interest of debts, and on insurance. But, as regards servants, considering the actual and historical variety of this

object of Economics is not wealth, but the moral action of men as associated for sustaining and continuing their life on earth (*sup.* § 1). But much of this moral action has precisely to do with the getting and using of wealth. Let us look then how in each household, and in each of those combinations of households called a nation, there can be, or can fail to be, a due balance between preparation and enjoyment, revenue and expenditure, wealth and men.

class of persons, it seemed to me better to let the payments made to them fall under different heads of expenditure, determined according to the nature of the service, than to attempt to group them under a single head. Already I have noticed the great economical difference of different kinds of servants (*sup.* § 54), and I think it would not be difficult to find a place for every important branch of them, as far as they were to be considered not industrial but ministerial labourers (§ 54), under some of the previous heads of enjoyment. Thus much of what is spent on body servants can be put down to expenditure on health, or dress, or washing; and the wages of grooms, coachmen, footmen, and other attendants, are in part at least to be set down to expenditure on recreation.—As regards the interest for debts, this is not to be reckoned as real or even nominal expenditure, but must be deducted before the debtor's revenue is reckoned up. The original loan may no doubt have been spent, say on hounds or gin; and while the process of spending was going on, the amount spent would have been rightly charged to the man's expenditure on sport and on sensual recreation. But that is over; and economically the payment of the interest is apportionment of property, not expenditure. The creditor is in a manner a partner in all the earnings and a co-proprietor of all the produce that are got in the name of the debtor. And thus when the interest is paid, nothing leaves the property of the debtor. All he does is to hand over, not his own, but the creditor's property to the creditor.—As regards insurance, we must distinguish the two kinds, real and personal. Real, or the insurance of things, as of houses, crops, or ships, against destruction or damage is plainly not real but industrial expenditure. Personal insurance, that is, a contract by which present payment secures a right to receive some benefit on some future occasion which is uncertain or of uncertain date, is also for the most part industrial expenditure, that is, incurred for the sake of net revenue not of enjoyment (*sup.* § 56). Such is insurance to secure sick pay, an annuity in old age, or payments to wife and children on the death of husband or parents. But where the enjoyment of some particular good, as medical assistance or a seemly funeral, is what is secured, the annual payments in view of such benefits may, I think, be set down as real expenditure, and charged in the two cases I have mentioned to expenditure, respectively, on health and on the service of the dead.

CHAPTER XII.

ENRICHMENT AND IMPOVERISHMENT.

Meaning of a Nation or Country, § 252—Meaning of National Wealth, § 253—Various Meanings of a Rich Country, § 254—Nature and Limits of National Enrichment, § 255, 256—Nature and Limits of Private Enrichment, § 257-260—Answer to the Complaints of the Socialists on Accumulation, § 261—Errors of Liberal Economists on Accumulation, § 262-264—Impoverishment, § 265—Warnings against Various Fallacies, § 266—Opposition between Private and National Interest in regard to Wealth : in General, § 267—Opposition in Particular Industries, § 268-272—Opposition between the Present and the Future, § 273—Opposition between National Interests, § 274—Mutual Help against Impoverishment, § 275—Various Combinations for this Purpose, § 276, 277—The Question of Compulsory National Insurance, § 278-282—Concluding Remarks on Insurance and Accumulation, § 283, 284.

§ 252. It may be well at the outset of this chapter to lay stress once more on the difference between what is material or tangible and what is immaterial or intangible, and again on the difference between persons and material things ; and also to recall the meaning of certain words : that a commodity is a good which is neither a person nor an intangible object ; that wealth is an aggregate of commodities ; that property is wealth over which particular rights are claimed by any person or body of persons (*sup.* § 49). But when we proceed to speak of national wealth, some further explanation is necessary. The difficulty is not in the term wealth but in the term national ; for what is a nation ? Already I have said that this is properly a matter for political science (*sup.* § 139) ; but as we must have in view certain definite groups of men and of commodities if we are to understand the relations of wealth and population, we must endeavour to get some terms suited to our purpose.

Now political or public, as distinct from domestic and private, groups of men can vary in size and in attributes from a parish to an empire ; and again, groups politically independent can vary in size and complexity from the small and simple republics of ancient Greece and medieval Italy, or a State like Denmark or Costa Rica, to a vast heterogeneous combination like the empires of Alexander, Augustus, and Victoria. But as on the one hand it would be of little profit to keep to the smallest and simplest political group and to discourse on parochial wealth and parochial population ; it would on the other hand be scarcely more profitable to take as our unit each independent political group and to speak in general for example of the wealth and population of the British Empire, delusively confounding together regions so different in their circumstances as Great Britain, Ireland, Canada, Jamaica, Malta, and Bengal. Let us take a middle course and use the word *country* (*pays*, *Land*) or *nation* (*Voik*) to express an inhabited region, or the inhabitants of a region, of considerable size and considerable political distinction (*de facto* if not *de jure*) from other regions. And let the word national serve as adjective for both country and nation. Such use of words is, I am aware, somewhat obscure, but I think clear enough for our purpose and near enough to common usage. Thus while we refuse the title of country to each French department or English county or even Prussian province, we can say that Algeria and Réunion, Scotland, Ireland, the Punjab, Ceylon, and New South Wales, Bavaria, Würtemberg, and Baden are each separate countries. So too Finland, Poland, Egypt and Java. And though there may be cases where the distinction is obscure or even inapplicable this does not destroy its general use.*

§ 253. It might seem simple, after having got a meaning

* The different States of the United States of North America might by some be held to be each a separate country, by others not. I think the title could hardly have been refused them before the civil war ; and even now I think they deserve it, possessing as they do, each such wide powers of independent legislation. A wandering pastoral tribe could hardly without some contortion of language be held a nation in the sense adopted. But this is of little consequence.

for nation, to say what was national wealth. And it would be, were each country a little world by itself, and nothing and nobody came into it and went out of it, or only an occasional traveller or occasional bundle of goods. But now the frontiers of most countries are traversed by a multitude of men and commodities going one way and the other; nor is there any regularity in this ingress and egress, or any fixed relation between immigrants and emigrants, imports and exports, passengers and goods. Partly as cause, partly as effect of this international communication, it often happens that a man living in one country draws his revenue from property situated in another country, or several others; and the question arises whether this property is part of the wealth of its owner's country, or of the country where it is situated. To me it seems far better to look to the *geographical* than to the juridical aspect of wealth; and without troubling ourselves about questions of ownership, to say that the wealth of a country is all the wealth within its borders, whoever may be the legal owners; and that any of this wealth, as long as it remains in the country, is part of the national wealth. If we keep fast to this geographical view of national wealth, we are not likely to fall into any serious difficulty or error. Naturally we cannot, and there is no need to measure it precisely. We can make some enumeration of cultivated lands, pastures, woodlands, of mines, factories, roads, railways, shops, houses, furniture, stocks of food and clothing. But how are all those conditions to be enumerated that are comprised under the word climate? And yet if we neglect them we may go wrong in comparing the wealth of different countries. For example, suppose two in all respects alike except in this, that one had a climate so mild and equable that there was no need at any season for heating dwelling-houses or wearing thick clothes, while the other country had a climate like that of Northern Europe and an apparatus for heating (fire-places and hot-water pipes, stores of fuel and of thick clothing, and means of preparation for producing these means of enjoyment) so abundant that the inhabitants could keep as warm as those of the first country. Ought we to say they were a richer nation because they had all this quantity of preparatory and

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enjoyable wealth for heating purposes, and the first country had none of it? By no means. Much rather the wealth of the two countries is the same; for the mild and equable climate of the first is as much an item of its wealth as the furs, and fuel, and fire-places of the second. No doubt if the second country were suddenly blessed with the climate of the first, there would be a seeming diminution of private wealth: the thick garments and grates and fenders would be well-nigh useless, their makers well-nigh ruined. But even if the apparatus for heating could be used for no other purpose and became altogether useless, still the additional good of warm air would be full compensation for this loss, and the country would be as rich as ever. Naturally those who had just laid in a great stock of the means of heating would lose; but then those who had just exhausted this stock, or who were habitually unprovided with it would gain, and the total result would be unaltered.

Let us add a word on one ambiguous matter. Are we to reckon as national wealth the vast tracts of habitable but uninhabited land included within the frontiers of colonial countries, like many of the States of America and Australia? Such land is undoubtedly wealth, and in the cases I am considering there is an undoubted political claim to it, and it is reckoned in the area of the States in question. But claims are not the same thing as facts; and where the unpeopled tracts like those, for example, in South or West Australia, in Canada, Brazil, and the Argentine Republic, occupy many thousands of square miles, they are best left as uncoloured spaces on the map, and held as not yet being parts of the countries to which they nominally belong.

§ 254. National wealth in the sense I have taken it is not the same thing as public wealth; for this should be taken as the property of all public bodies that are sufficiently coherent to form a juridical person and be the subject of rights of ownership. Thus it includes all communal (parochial) and municipal property, as well as what belongs to the central authority and is commonly called government property. This is quite distinct, as is plain, from national wealth. It is not even fully correct to say that it is a part of national wealth, and that national wealth is made up of the sum of

the public and private property of the nation. For this is mixing up two points of view. In reckoning public as well as private wealth, we consider juridical persons and the property over which they have rights of ownership wherever it may be ; and thus reckon property they own, though it be abroad, and exclude property, though it be at home, if it is owned by foreigners ; whereas in reckoning national wealth in the manner I have adopted, we look to geographical area, and ask where the wealth is, not to whom it belongs.

If we take the same geographical point of view, we must judge of the wealth of different countries by the average wealth to the square mile in each ; and then according to this average, one will be richer or poorer than another ; and a rich country will be one where there is an abundance of wealth to the square mile. Thus we must call Belgium a rich country, and say it is much richer than Russia or Germany. Only mark there are at least four other modes of looking at national wealth, each suited for special purposes. First we may look simply at the total wealth, without considering its relation to the size or population of the country, or its mode of distribution ; and then Russia would be richer than Belgium. This is a point of view for politicians. Secondly, we may look at the relation of wealth to population, and call one country richer than another if the average wealth a head is greater. Thirdly, we may look, not at averages, but at the actual wealth of the great bulk of the inhabitants, and if this is greater in one country than another, we say the one country is richer than the other, even though the average wealth a head be less. From this third point of view it is probable that Tuscany in the middle of this century was a richer country than England, though from the second point of view poorer. Fourthly, we may look at the actual number of rich people, and call a country richer than another if there are more rich people in it, whatever the other circumstances may be. This is a point of view not to be neglected by students or actors in the field of politics, and is of prime importance for dealers in works of art and costly adornments, and for professional actors and singers, who might come sadly off in a country peopled only with yeomen, however prosperous. Fifthly, there is the

geographical point of view I have taken, according to which we look at the relation of the wealth to the size of each country, and which seems most convenient for the discussion of enrichment in this chapter and of population in the next. For example, it seems more convenient to look at Scotland, and the wealth in it, and the annual increase or decrease of this, than to look either at Scotchmen and their wealth, for many of them are scattered over the globe, or at the dwellers within Scotland and their wealth, for much of it lies outside Scotland. Only let us beware of sophistical clearness. We cannot in reality make a clean separation between material goods and their use, or between wealth and welfare. And as long as we speak of wealth in general, without regard to its kinds and to the people who use it, we are dealing rather with words than things.

§ 255. The process of a nation or a family getting richer is called respectively, national and private enrichment. Let us first look at national enrichment, its nature and limits. It is necessary to remember the distinction between preparatory and enjoyable wealth (*sup.* § 51); for the enrichment is of a very different character, according as it consists in the accumulation of the one kind or of the other. Wealth used for immediate personal application I have called enjoyable, such as food and drink, household fuel, clothes, houses, furniture, ointment, tobacco, pictures, pleasure grounds, medicine, firearms. Let us examine the accumulation of this kind of wealth only, and suppose that while the means of production remain the same there is in a given country more food laid up in each storehouse and larder, more clothing in each wardrobe, larger or more numerous houses, baths, theatres, and pleasure gardens; more statues, pictures, fountains. Now can this mode of national enrichment go on indefinitely? Plainly not, if the population of the country increases. For the means of production remaining the same, and the persons to be fed, clothed and sheltered, increasing, the immediate need for means of enjoyment will increase in proportion, and the annual surplus of them that we started with, will become less and less, till it is changed into a deficit. But even if the population is stationary the limit to accumulation, though less plain, is no less certain,

and for two reasons First, the great mass of enjoyable commodities require some outlay for their preservation ; works of art and costly garments must have constructions for their exhibition and preservation ; dwelling-houses and pleasure grounds must have attention and labour, or they will go to rack and ruin ; horses and hounds must be looked to and fed every day. And thus very soon it would be as much as ever this stationary population could do to keep up its stock of enjoyable wealth ; and further accumulation would cease. Secondly, there is as we have seen (*sup.* § 145) a limitation to our desires and to the capacity of goods to satisfy them. And thus it would not avail the nation we are considering if the accumulation was confined to those few goods, like jewelry, that need little or no labour to preserve them. Their value to each possessor would at last sink to zero, for there can be a surfeit even of jewelry ; and fresh additions would cease to be wealth because they would cease to have utility.

The accumulation of the means of enjoyment is subject, we have now seen, to limitations that soon begin to check it and in time stop it altogether. We have yet to examine the means of production (preparatory wealth), namely, wealth not used for enjoyment, but in the preparation of what will be so used, such as farms and farm buildings, fences and irrigation works, seed corn and live stock, mines, factories, workshops, minerals timber, materials of manufactures, canals, merchant ships, and all kinds of tools and machinery. What are here the possibilities of enrichment ?

§ 256. It is before all things necessary to distinguish the two cases of a stationary and an increasing population. If the population is stationary the limits are soon reached of accumulation of the means of production. It is idle to enclose a new field when there are scarce labourers enough to till the old ones, or to have two ploughs if there is but one plough-boy ; and a mill without mill hands is of no use. Thus, although by such devices as making the men work harder, and employing women and children, there can be for a short time a very rapid accumulation of means of production, this resource is soon exhausted, and the limits of the power to labour soon reached (*sup.* § 95), and the sooner, the

more fully worked the population was previously. At no remote time therefore the accumulation of the means of production will of necessity cease ; a new plough will only be a new encumbrance and not wealth, and further accumulation can only take the form already considered of accumulation of means of enjoyment. In real life it would be more likely for the two kinds of accumulation to go on together, but in the case we are considering of a stationary population the limits of either kind would not be one whit extended. Naturally indeed these limits would be extended by the introduction of concerted labour (*sup.* Ch. III.) and by improvements in industrial arts (*sup.* Ch. II.); but not extended indefinitely. Naturally also a nation may be in such a position of power as to be able to make others tributary and a stream of goods pour in and none flow out in return. But this will not enable a stationary population to accumulate more means of production ; and is likely to lessen them, as the need of producing is less.

But suppose the population is increasing. What is now to hinder an increase in the means of production, fresh fields tilled by the fresh hands, or more intense cultivation of the old fields, and more looms and workshops, more means of transport and commerce ? We must first remember that an increase of population, if it is serious, presupposes a simultaneous increase of enjoyable wealth : there must be food and drink, pots and pans, clothes and bedding, houses, fuel and fire-places, for the new inhabitants, or they will not even live, much less take part in accumulating means of production. And it is not enough that there be means of enjoyment ; there must be different sorts and the right proportion of each : not too many houses and too little food ; not too much food and (in cold countries) too little clothing ; not too much of one kind of food and too little of another. Otherwise the increase of population could not live, and we should fall back on the previous case of a stationary population. But supposing each necessary provided in due proportion, then indeed as the population of a country increases there can be an increase in the means of production within it. Naturally in regard to these also there must be a proper proportion of the different sorts : not too many fields tilled and too few instru-

ments to till them with ; not twice as many means of spinning as of weaving what has been spun ; not a whole navy of merchant ships to take the produce out of the port and only a few miserable mules to bring the produce from inland. But this also being supposed to be properly attended to, then indeed as I have said there can be an increase of the means of production within the country as well as of the means of enjoyment. How far this increase and the increase of population of necessity linked with it can extend, depends on the extent and character of the country and the conditions of the industrial arts, and is a problem already glanced at in a previous chapter (*sup.* Ch. II.) and to be duly considered in the next chapter. Here the conclusion I wish to emphasize, and which I hope is evident from what has gone before, is this : that, though national enrichment, that is, the accumulation of wealth within a country, may indeed, as is shewn by England, Belgium, and mediaeval Venice and Flanders, advance very far : nevertheless, as this advance presupposes an increase of population, the average wealth a head is not capable of any very great, much less, indefinite increase. But this is no reason against gigantic accumulations in few hands.

§ 257. Let us turn to private enrichment and first consider the simplest case, that namely of a self-sufficing peasant family who neither buy nor sell anything, but provide themselves from the produce of their land and cattle with food and clothing, dwelling-place and fuel, furniture and implements. The accumulation of wealth by such a family has much the same features in miniature as national accumulation. They can increase their means of production : improve their land by drainage, multiply or elaborate the implements of husbandry and of preparing wool and leather, flax and wood, for clothing and utensils. But they cannot accumulate more of this preparatory wealth than their joint labour can utilize. It is no use having a dozen strips of land beautifully drained or irrigated when half a dozen is all they can work. Again, they can accumulate means of enjoyment, can adorn and enlarge their house, construct pleasure gardens and playgrounds, collect stores of linen, keep a more abundant stock of food and of firewood, gather together such durable orna-

ments, whether they be of jasper, or jade, or agate, or amber, or ebony, or ivory, or gold, or silver, or pearls, or tortoiseshell, as their land, or the neighbouring woods, or wilds, or sea-coast may afford. But for the reasons before given, that most enjoyable goods need care, and that of all of them only a certain quantity is enjoyable, the family we are considering cannot indefinitely accumulate this sort of wealth any more than they can indefinitely accumulate the means of production.* Of course if they increase in numbers and keep together on the same land there can be an increase of the two kinds of wealth (not of one by itself), till the limits of what the land can support are reached (limits to be considered in the next chapter); but the average wealth of each member of the family can shew no very great augmentation, and we are as far as ever from explaining the origin and existence of the rich man who has even so moderate an income as a thousand pounds a year. Now history shews us various modes in which a rich class has been generated, and these modes I hope in the next Book fully to examine. Here what has to be examined is the social relation that is common to all the different historical constitutions of society wherever there is a rich class or rich family, and which must exist if any single family or individual is to accumulate more wealth than that modest measure possible to a single self-sufficing peasant family. The relation is simple, though it has been obscured by interested sophistry. It is the relation not of family communism but of master and servant, and how it works can be shewn by examining a simple case.

§ 258. Let us start with the same self-sufficing family as before. Then say that two strangers are brought into the

* If it is objected that by hoarding gold and silver an almost indefinite augmentation of their wealth is possible, I answer, that this is to forget the nature of the case supposed. We are supposing no buying and no selling: of what use then would be a pit full of gold? And even if there was buying what could they buy with it? For *ex hypothesi* they have as many implements as they can use and as much enjoyable wealth as they can keep up. Of course if they could hire servants to work the means of production and to enable them to enjoy the means of enjoyment, there would indeed be no immediate limit to their enrichment. But this is precisely the case we are *not* considering, and have expressly excluded by the term 'self-sufficing.'

family, and as regards labour and enjoyment are not treated on an equality with the members. Else the case will be merely like an increase in the numbers of the family, only by adoption instead of birth. So the two strangers are treated as inferiors or servants, and work harder and enjoy less than the other members of the family who are their masters. Let us say one of the servants is a man who works in the fields, the other a woman who works in the house ; that the labour of the man provides food and materials of clothing enough for himself and his fellow-servant and one of the family ; that the labour of the woman dispenses the women of the family from cleaning the house and from some of the labour of spinning, weaving, and sewing. The family in this way gain time which they can devote to amusement or study, or to accumulating further means of enjoyment (as enlarging their house, or making and maintaining a playground), or to accumulating further means of production (as diverting a stream and making it turn a wheel, or water a meadow). Now if only this process can be repeated and servant after servant brought into the house, the farm and the workshop, the family can by degrees give up industrial labour, and at last have all the work done by servants, except mere direction ; and even this is in part transferable. Instead of the petty peasant farm they have got many thousand acres under their control, and a corresponding number of cattle and buildings, of implements and materials of various kinds of labour, all of which are now of use to them as they have servants to work them. And besides this accumulation of means of production they have also an accumulation of means of enjoyment : all sorts of food and elaborate apparatus for cooking, and many changes of garments, means of bathing and washing, of being anointed and perfumed, a dwelling with many rooms and much furniture, a fragrant pleasure-garden, courts and greens for athletic sports, riding horses, carriages, hounds and hawks, and preserves stocked with game, all which things are now of use to them, as they have servants to take care of these things and make it possible and pleasant to enjoy them. And thus the family of peasants is converted into a family of gentlemen, who have leisure from industrial labour and can use this oppor-

tunity for cultivated or for riotous living, for selfish pleasures or works of piety ; but whether for good or for evil they have it to use.

Naturally the number of servants or serving-families requisite to enable a single master-family to live at ease as rich people, depends on many circumstances, notably the state of the industrial arts, the fertility of the land, the precautions needed against heat, or cold, or wet, and the national recreations. But let us for the sake of a figure and a formula, not professing but disclaiming exactitude, say, that when one family has a hundred others in its service, it is rich.

§ 259. In real life the relation of the upper to the lower class is often made more difficult to apprehend through the introductions of payments in money and wide-reaching combination and division of labour. But the relation exists. It appears with comparative simplicity in a feudal seignory or manor that has but trifling dealings with the outside world. On this manor may dwell the lord and a hundred vassals or tenants. Some of these have each a small farm from which they both support themselves and bring at intervals to the castle various contributions fixed by custom, as corn, flax, wool, poultry and eggs. Others with smaller farms have no surplus produce from these to bring to the castle, but have surplus time, and work a certain number of days on the lord's farm, or act as carpenters, blacksmiths, or potters. Others, again, are occupied within the castle, and are clad, fed and lodged by the labour of the tenants already mentioned, while they themselves, acting as domestic servants, help the lord and his family to live a cultivated life. Now for all this labour and all these contributions the lord may return a superabundant reward, and the castle may defend the life and possessions, settle the disputes, assuage the calamities, support the old age of all the tenants, and be to them a centre of cultivation and piety ; or not. But this is not the point. The point is, that in that small society of men there is room for one castle only, not for many castles ; for one lord's family, not for many lords' families ; and this fact, whether the lord use his position for good or for evil, remains the same.

In countries constituted like modern England or France, one part of the social inequality that must accompany every rich family, is as plain as ever. To live as a gentleman a man must have a number of persons to serve him, whether or not they stand to him in the legal relation of servants. Bid a duke live at home with his family, and forbid them the use of any kind of servant, and see how they lapse into the position of poor people, though their income be £50,000 a year. They must live in a cottage, for they cannot keep even a middle-class house clean, much less a palace. They must be chary of washing when every drop of water has to be pumped up by the duke and carried into the house by the heir; and the meals will be simple, to save the labour of the duchess and her daughters. But it is needless to insist further on the necessity of each rich family being surrounded by this species of subordinates; for it is obvious: whereas, though equally necessary, it is not equally obvious, that for every rich family there be a certain number of the other species of subordinates, who utilize the means of production and get enough to support themselves and to have a surplus over that may help to form the revenue of the rich family. For instead of a definite number of petty husbandmen and handicraftsmen visibly surrounding and upholding a single lord, many hundreds of rich people may draw their revenue from property worked by many tens of thousands of poor people, without our being able to point out any one in particular of the poor who works more for any one of the rich than for any other. They may never see each other, never know of each other. Many of the poor may be in name independent freehold peasants or traders on their own account. For not merely as a labourer producing more than his wages or his rations, or as a tenant or borrower paying rent or interest for the use of others' property, can a poor man contribute to support the rich, but also as a buyer or seller, or again as a payer of taxes. For example, the larger dealers in fish in London or Paris may be rich, or on their way to be rich, because of the price for which they are able to get fish from the poor fishermen of Scotland or the Bay of Biscay. And though in name independent these fishermen are in reality as much the servants of the dealers as

though they were hired workmen on the dealers' property. Again the cabinetmakers of the East End of London, forced by dealers, who own 'slaughter-houses,' to sell their produce for little more than the cost of the materials, are supporting those dealers or their customers in mediocrity or opulence, and are in fact, though not in name, their servant workmen. (Cliffe Leslie, *Land Systems*, p. 375.) Again many incomes of the rich in England are paid by Indian peasant cultivators in the shape of payment to the Indian Government, which then hands the proceeds over to the English holders of bonds, guaranteed railway stock, and analogous securities.

§ 260. But however complicated the application of the principle, the principle itself is simple, that from the nature of the case every rich man must have a number of poor men working for him, whether they form a visible group working for him alone, or whether he has a tiny fraction in the surplus produce of hundreds of thousands. And the greater his wealth the greater must be the number of his servants or (what comes to the same thing) the larger his share in each joint servant of himself and other rich people. Thus taking for convenience the estimate of a hundred families being the requisite number for the service of each gentleman's family, and that this number make it possible to receive and to enjoy an income of £1,000 a year (in the present circumstances of England): if we are told the number of families available as servants, we can easily calculate the possible number of gentlemen. The greatest possible number is where none of them have more than £1,000 a year and where also there is no middle class, that is, persons who have indeed subordinates and are served, but by less than a hundred families. And you cannot increase the middle class on one side or the grand gentlemen on the other without *ceteris paribus* lessening the number of simple gentlemen. For the thousand families enabling a grandee to have and use £10,000 a year, or enabling a hundred of the middle class to have and use £100 a year, would have made it possible for ten gentlemen to have lived instead of the one grandee, or the hundred petty tradespeople. But this is merely arithmetic. The great point is that every serious advance in the wealth of a private person from the petty trader with one workman and one maid-of-all-

work to the millionaire with provinces full of workpeople and palaces full of domestics, must imply an increase of working dependents. It follows that only in a numerous society can there be many rich people, or any very rich ; and that you cannot multiply even a middle class, much less a rich upper class, without multiplying in due proportions a poor lower class.* You may have the poor without the rich : you cannot have the rich without the poor.†

§ 261. I have striven to make clear the nature of private enrichment and the inequality which it presupposes. But also I hope that in a former chapter I made sufficiently clear and need not repeat how inequality of wealth is not an evil or an injury, but a benefit to mankind and a disposition of Providence (*sup.* § 149, 150). And thus, although in explaining the nature of accumulation my language may seem somewhat like to that of the Socialists, I do not reach their conclusion, nor consider that I have unveiled a mystery of iniquity. They may say first that the secret of private enrichment is the appropriation of unpaid labour, and secondly that the whole of the produce of labour is due to the labourer without any deduction even for so exalted an

* This is well understood by the speculative owners of means of production, who are eager for what they call cheap and abundant labour, that is, for a large number of their fellow-men who can be induced to work hard for them and receive but a small reward. In recent years this eagerness has been conspicuously displayed in the "importation" of Hindu workpeople into Ceylon, Assam, Guiana, Réunion, and Mauritius ; of Chinese into California, Cuba, Peru, and Borneo ; of Polynesians into Queensland.

† Some may object that in England the numbers of very rich people, and especially the numbers of moderately rich and of the middle classes, are altogether disproportionate to the numbers of the poor. I think it is true ; but it is no objection to what I have set forth. For though the servants that help all this middle and upper class to enjoy their wealth must in the main live with them in England, the means of production they control, and the servant-workmen who turn these to account, may be many of them in some other country, and in fact many of them are, notably in Ireland, Egypt, the West Indies, and above all in British India. And thus habitually the money price of imports into England exceeds that of the exports by many tens of millions ; while the excess in the number of the rich and middle classes in England is in proportion to the deficiency of those classes in those other countries compared with the immense number of their poor.

end as feeding and fattening a pampered plutocracy. But on this second proposition, which is their major premiss, I join issue, and refuse to admit such a claim even on the part of the most exemplary labourers. For not one of them can do so much as one stroke of work without the previous appropriation of means of production. Such appropriation indeed is justifiable; every man has a natural right to live, nay to more than this: he has a natural right to the means of living a decent life morally and materially. But what is a natural right if it be not a right given by the natural law? And what is the natural law if it be not one portion of the law of God, that portion namely of God's commands that are made known to us through the light of reason? Moreover He from whom the right comes may attach conditions to its enjoyment. And in fact God has imposed on men the obligation of labour. We may claim in virtue of the divine law a minimum of sustenance, of rest, and of recreation; but this is quite another thing from the produce of our labour. The man stricken with palsy can claim no less than that minimum, the stoutest labourer can claim no more. This labourer, like all of us, is bound to work, not in order to fill his pockets, but in order to obey his Creator; and it is only by an ellipse that he can speak of the produce of his labour. For is it not God who gives the increase? Is not the earth the Lord's and the fulness thereof? Let the labourer then cease from murmuring. He can claim from his fellow-men to have as much of the produce of his labour (or its equivalent) as will give him the opportunity of a decent existence. He has no right to more of it than this quantity, nor yet any right to refuse to produce more than this quantity. The surplus may go to his friends or his enemies, may be spent in ways he likes or dislikes; he may receive an abundant equivalent in help, and protection, and care, and instruction, and enlightenment, from those whom this contribution of his among others may enable to live a cultivated life; or he may receive nothing of the kind, only scorn and neglect. But all this is not his concern; it is not for him to discuss the mysterious dispositions and permissions of divine Providence; and if those who hold power in the society in which he lives misuse what may be

said to be his contribution to the life of that society, it is not for him to murmur or to punish. There is One who sees and in His own time will bring all to account. True the man may say that as a fact much of the wealth of the rich classes in modern Europe has been gathered together and is kept up by no mere innocent surplus, such as I have supposed, of the produce of the working classes' labour, after they had been provided with the means of decent existence, food and clothing, house and home, leisure and moral instruction ; but by dreadful deeds of cruelty, extortion, and fraud for more than three centuries past: plundering the property of the poor and of the Church, trampling down handicraftsmen and factory workers, agricultural labourers and cottiers, miners and seamen, ruthless harrowing of weaker races, American Indians, negroes, Hindus, Chinese, Polynesians ; and that deeds of this character are not things of the past.* It is too true. The world is indeed corrupt. The records of political power are of a colour not much brighter. But then the past is irremediable, and even if punishment were of any use, the great bulk of the offenders are beyond our reach. And whatever the past, the present natural right of the poorer classes is what I have explained. It is no more, though for ages they may have been ground to the dust ; it is no less, though for ages they may have had what for their circumstances is the utmost possible abundance. Our efforts then must be directed to secure for every family the opportunity of a decent existence, and to make this the first charge, so to speak, on the produce of labour: what is over can remain in the hands of the present owners of property however dark their antecedents. It is not for us to avenge (even if we could) the evils of the past, but to keep those evils away for the future. A violent social revolution like a violent political revolution is only to increase the sum of injustice.

§ 262. I have endeavoured to give the Christian justification of inequality among men in regard to wealth, and

* It might be well for those who think there is no accusation to answer in regard to the wealth of modern Europe and America, were they to read the five chapters on 'The process of accumulation' in Karl Marx's work *Das Kapital*, 2nd ed. Ch. XXI.-XXV.

enjoyment, and the remuneration of labour ; nor do I believe any other adequate justification can be found, any other conclusive answer to the objections cast by the Socialists against the accumulation of wealth in a few hands. But this answer is plainly one that cannot be given by Liberal economists who decline to be helped out of the difficulty by theology. And thus they are driven to disguise the process of accumulation in order to justify it. Instead of admitting that the accumulation of any considerable amount of the means of production (preparatory wealth) in the hands of a few owners has been, and must be, in the main, the result and consequence of the more or less enforced labour and parsimony of a working class : the process, in defiance of facts and logic, is represented as if the rich man of the future, first by dint of much toil and trouble, pinching and privation, heaps up the means of production and food for 'labourers,' and then proceeds to support the labourers and give them employment. In reality it is clear from what I have already said on accumulation, that (in the main) he cannot do anything of the sort. These good economists put the cart before the horse. The labouring servant must (in the main) precede the accumulation and is the cause of it. It is indeed not strictly true to say that the actual working class families in England or France are those who for generations past have been producing more than they consumed and have been sowing much that others have reaped. But it is far more true than the other statement, that the rich families are those who for generations past have been laborious and frugal, while their labourers and servants spring from the idle and improvident. It is captious and misleading to say that the rich depend on the poor and are supported by them. But it is worse than captious and worse than misleading to say that the poor depend on and are supported by the rich. If no better apologies than these can be made for inequality, it were wiser to make none.*

* Mr. Ruskin has written on this matter (in two letters to the *Pall Mall Gazette*, 29 Jan. and 31 Jan. 1873, reprinted in *Arrows of the Chase*, pp. 100-104) with such clearness and force that it is not merely pleasant, as usual, to listen to him, but also profitable. "These," he

Adam Smith may be held responsible for the fundamental error on which these apologies are based. He puts 'labouring servants' or labourers in the same category as 'labouring cattle' and reckons the 'maintenance' of both as a 'circulating capital' (*Wealth of Nations*, Bk I. ch. VI. p. 23; Bk. II. ch. I. p. 120; ch. V. p. 161). He makes the annual produce of land and labour fall into two parts, one part replacing capital which comprises among other things the provisions for the 'productive labourers,' the other part constituting a revenue in the shape of profit of stock or rent of land (*Ibid.* Bk. II. ch. III. p. 147). Thus cost and remuneration, means and ends, things and persons, are confused. The revenue of the upper classes is rightly called

says, "are the facts. The laborious poor produce 'the means of life' by their labour. Rich persons possess themselves by various expedients of a right to dispense these 'means of life,' and keeping as much means as they want of it for themselves, and rather more, dispense the rest, usually only in return for more labour from the poor, expended in producing various delights for the rich dispenser. The idea is now gradually entering poor men's minds, that they may as well keep in their own hands the right of distributing 'the means of life' they produce: and employ themselves, so far as they need extra occupation, for their own entertainment or benefit, rather than that of other people. There is something to be said, nevertheless, in favour of the present arrangement, but it cannot be defended in disguise; and it is impossible to do more harm to the cause of order, or the rights of property, than by endeavours, such as that of your correspondent, to revive the absurd, and, among all vigorous thinkers, long since exploded notion of the dependence of the poor upon the rich." And in the next letter he makes a confession of how his own wealth was got for him by his father. "He [Mr. Ruskin's father] and his partners entered into what your correspondent mellifluously styles 'a mutually beneficent partnership,' with certain labourers in Spain. These labourers produced from the earth annually a certain number of bottles of wine. These productions were sold by my father and his partners, who kept nine-tenths, or thereabouts, of the price themselves, and gave one-tenth, or thereabouts, to the labourers. In which state of mutual beneficence my father and his partners naturally became rich, and the labourers as naturally remained poor. Then my good father gave all his money to me." And he challenges his adversary to give, "not an heraldic example in the dark ages . . . but a living example of a rich gentleman who *has* made his money by saving an *equal* portion of profit in some mutually beneficent partnership with his labourers." I cannot find that any answer was ever made to this challenge, and it is not surprising.

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revenue ; but the revenue of the lower classes is perversely reckoned as expenditure, like the provender for cattle or the grease for machinery. His error is one of the *idola fori*. The language (notably the misleading term capital on which I have already spoken *sup.* § 58), the ideas, and the mode of reckoning proper to a counting-house, are transported to the chamber of the philosopher, and he who is dealing with the wealth of a whole society not of a part, reckons the gains and losses of a part as though they were the gains and losses of the whole. And a flock of economists have since followed their leader like so many sheep into this pitfall.*

§ 263. Two particular modes of apology for the accumulation of private property, though not very wise, yet from their currency deserve some sort of refutation. The first sets the upper class before us as the receivers of well-earned wages. Rich and poor, we are to understand, are linked together in a just and equal partnership, the rich in the main doing the

* For example J. S. Mill in his unfortunate chapters on capital. But the most singular instance of this lapse is that of Cairnes. For in one place he rightly observes that the vocabulary of commerce is "framed almost wholly from the capitalist's standpoint," and that "Political Economy is for the most part compelled [that is, Liberal Economists have chosen] to draw its nomenclature from the vocabulary of commerce" (J. E. Cairnes, *Leading Principles of Polit. Economy*, 1874, p. 54). And he goes on to rebuke the preposterous confusion of cost and remuneration and to complain of Mr. Brassey for speaking of the English facilities for getting coal and iron being neutralized by dear labour ; and he marks that high profits are an obstacle to the extension of British trade in precisely the same sense, and it is an absurd one, as high wages are (*ibid.* pp. 58-60). And yet—it is scarcely credible—he takes up later the very standpoint he has condemned and makes wages a part of capital, to be put on a line with raw material and fixed capital (*ibid.* pp. 199 *seq.*). After all however he does but follow the inconsistency of Adam Smith who in one place (Bk. I. ch. IX. pp. 44, 45) co-ordinates wages and profits, and sharply rebukes the manufacturers who complain of the bad effects of high wages in raising the price of their goods, and say nothing concerning the bad effects of high profits. A clear exposure of the fallacy that 'capital' supports labourers is to be found in Mr. Henry George's *Progress and Poverty*, Bk. I. Ch. III. and IV. (English edit. 1881) a useful book for its destructive criticism but (like other Socialist works) of little avail for construction. See also W. Dillon, *The Dismal Science*, pp. 97-111.

head-work, the poor the hand-work, and the joint produce of their labour being divided between them, the extra share of the rich being only what is needful to keep up in efficiency, and reward with justice, their higher labour of direction, management, and superintendence. But this pleasant picture is a phantasm. For first, the receipts of those who really are engaged in direction, are often very far indeed beyond what can be justified on the principle of a fair and equal partnership. We can see this by comparing the profits in many a house of business with the salary paid to managers and directors. When they have paid themselves part of their receipts in the shape of salary they do not, I apprehend, divide the remainder among the workpeople or the poor, but divide it among themselves as profit. And even if we are such bold apologists as to give these profits that very title of wages or salary which the receivers disclaim; we cannot without becoming ridiculous give this title to all rent and all interest, with a view to their justification; as though an absentee landlord superintended and directed the farming on his land, or as though a lady with £5,000 a year from railway dividends spent her time as a matter of course in perambulating the line and seeing that all the officials were properly employed.* Mercantile profits, and rent, and interest can be justified indeed on the grounds I have previously explained of the union of rich and poor and the mutual position assigned to them by Providence; but not on the ground of equal partnership, when, as we have seen, the accumulation of much wealth in the hands of any single person presupposes an unequal distribution.

§ 264. The second mode of apology I have alluded to is still more unfortunate than the first. The rich are made to appear, not indeed as labourers, but in the still stranger garb of ascetics. In Mill's words: "The profits of the capitalist are properly, according to Mr. Senior's well-chosen expression,

* Ferdinand Lassalle, in his famous pamphlet *Herr Bastiat-Schulze von Delitzsch*, 1864, pp. 196-198, exposes the wretched sophistry concerning 'geistiger Arbeitslohn,' and gives an illustration of how the net dividends of the Cologne and Minden Railway for 1862 were 3,367,521 thalers, of which only 12,275 thalers were absorbed in paying the salaries of the higher officials on the line.

the remuneration of abstinence. They are what he gains by forbearing to consume his capital for his own uses, and allowing it to be consumed by productive labourers for their uses. For this forbearance he requires a recompense" (*Principles of Polit. Econ.* Bk. II. ch. XV. § 1). Or as Cairnes puts it, abstinence is "the act of abstaining from the personal use of wealth with a view to employing it in productive industry, combined with that low degree of risk inevitably attaching to every such act" (*Leading Principles of Pol. Econ.* p. 89). It is a sacrifice to be co-ordinated with labour and requiring a reward to stimulate its exercise. The apology then or the plea is, that a man deserves a reward for choosing to have his property used by others for production instead of using it himself for enjoyment. For the self-denial of choosing the first alternative he is to receive back his property not merely whole and entire but with an increase.

Now in regard to this remarkable claim, note that the alleged choice is by no means evident. A plough can be consumed by rust but hardly by a landlord; raw cotton or even the yarn cannot forthwith be enjoyed as a garment; a cloth mill, though it could serve as a habitation, would be a very comfortless one, if the owner had not previously been living in a hovel. The greater part of the means of production cannot at pleasure be converted into means of enjoyment. It is true that in some societies one or two rich men might sell their farms and factories and buy themselves a palace of delight. But this exchange of means of production for means of enjoyment is not possible for the rich classes taken as a whole; because if many of them attempted to exercise the alleged choice and to sell, they would find no one to buy. And thus the attempted justification not of one or two rich people taking interest, but of all the many thousands who take it, rests on a choice which precisely the many thousands cannot exercise.*

But even supposing there is the choice alleged, it is no justification for interest. The so-called abstinence gets a reward without any 'interest' being paid. For we can say,

* Several good remarks on this subject are to be found in Lassalle, *l. c.* pp. 86-88.

using the phraseology of the foregoing economists, that 'the capitalist,' by abstaining from the personal use of a portion of his wealth and handing it over to 'productive labourers,' merely postpones that personal use, but does not renounce it. Meanwhile these labourers do him the good turn of keeping the wealth intact, ready for him to consume when the fancy takes him. They warehouse for him gratis. Were it not for them he must have done the business of storage himself. It is quite beside the mark that in *their* hands the property has yielded a revenue: the point is, what would have become of it in *his* hands; for his whole claim rests on the plea of his *not* having done something he might have done. Nor is it any avail for Cairnes, the champion of abstinence, to urge the serious and often severe sacrifice of the middle classes, the smaller dealers and producers, who save (*ibid.* p. 92). I do not deny the sacrifice; but this merely allows us to use the word abstinence for their conduct without being ridiculous: it does not prove that the abstinence must be rewarded by interest. Of course in some way it must be rewarded: it would be hard if the petty tradesman was neither to eat his cake or keep it. But he does keep it. Instead of consuming all his net revenue, he keeps a part for a time when it will be of more use to him than now, as when he is old or sick; or he keeps it for his children whom he prefers should one day enjoy it rather than himself. He is an excellent man; but not even for him is self-denial any plea for getting back more than what he laid by—of getting interest in addition to the principal; while to put forward such a plea in defence of the rents and dividends of the rich, is to justify the Socialists in their indignation and their scorn.* The time has come

* Thus Lassalle (*l. c.* p. 110), of whom I give a very free translation, exclaims as follows: "The word is spoken! The profits of capital then are the wages of abstinence! O happy word! priceless word! The European millionaires then are ascetics, Hindu penitents, saints on pillars, and standing each on one leg on his pillar, they bend forward wasted and wan, and hold out a plate to the people to collect the wages of their abstinence. In their midst, conspicuous above all their fellow-penitents as head penitents and abstainers are the Rothschilds! *That* is the state of society! How ever could I have been so mistaken about it!" Nor can such rebukes be escaped by saying the word abstinence is used in a technical sense. For it is not allowable, in matters relating to justice

when neither this nor any other sophistry of Liberal Economics can deliver us out of their hands.

§ 265. National impoverishment, or the process of a country becoming poorer, is best understood as the diminution of the wealth within its borders; whereas private impoverishment is the process of a family or individual becoming poorer, that is, the diminution of the property over which they have rights. It is necessary to keep these two kinds of impoverishment distinct, because the losses of a private family may happen to be no loss to the nation, the wealth being merely transferred to other hands; while conversely, circumstances that are a cause of impoverishment to the nation, may happen to be a cause of enrichment to a private family. Again, in a rich family a great increase in the number of members is likely to lessen the wealth and social position of each of them, and conversely, if all die but one infant, that infant becomes a person of great wealth. Whereas from the national point of view an increase of population almost of necessity implies that there will be more wealth within its borders, and a decrease of population that there will be less. If a pestilence swept away half the inhabitants, many acres would remain untilled, many buildings would be deserted, many instruments would lie unused till they were spoilt, many stocks of materials would rot away. And besides these means of production many means of enjoyment would become useless. We should find that the tables and chairs, knives and forks, beds and bedding, were too many; we should see houses falling into decay, gardens choked with weeds and briars. All of which ought to be evident from what has already been said on the effects of war (*sup.* § 102, 103) and the nature of accumulation (*sup.* § 255, 256). What indeed would be the effect, not on the total wealth within the country, but on the average wealth a head, is another matter and depends on circumstances that had better be reserved for the next

and morality, to use in an arbitrary sense words which in their ordinary sense, in the given context, would imply moral blame or approval. I might as well call those who lived from rent or interest by the name of parasites, drones, or vampires in a technical sense, and innocently say I meant no harm by it.

chapter (on population). It is enough at present to have marked how great would be the national impoverishment.

There have been among economists many controversies about national impoverishment and what does or does not lead to it: what are the respective effects of parsimony and prodigality, of little or of much being spent by the rich on costly superfluities, or by Government on war or magnificent public works, and whether there can be a general glut of all commodities. These controversies springing partly from mutual misunderstanding and confusion of words, partly from illogical reasoning, partly from divergence in first principles, have, like the controversies on the nature of capital and on productive and unproductive labour, been a melancholy waste of pains and paper; nor will I descend into the inky arena, but only stand by the side and utter a few warnings.

§ 266. A. General statements, that the nation or the poorer classes gain by the parsimony and lose by the prodigality of the rich, or conversely,* are frivolous and immoral: frivolous, because ignoring the varieties of parsimony and prodigality, and the varieties of social states in different countries and different times: immoral, because implying the rich fulfil their duty to the poor, not forsooth by the good deeds of Christian charity (*sup.* § 150), but either by greedily getting together all the wealth they can lay hold of, or else by greedily gormandizing on what has been got together for them by their predecessors.†

B. We must distinguish personal consumption from net expenditure; for the one is of necessity diminution of wealth though the consumer be the most parsimonious of economists, whereas the other may be mere transfer and no diminution of wealth, though the spender be the worst of prodigals. There is no loss to the nation in mere payments: the loss first begins when the goods are consumed, or destroyed, or

* So Adam Smith sets down every 'prodigal' as a 'public enemy' and every 'frugal man' as a 'public benefactor' (*Wealth of Nations*, Bk. II. Ch. III. p. 151).

† I hope in the Fourth Book to shew the folly of the attempt of Economists to make luxurious expenditure or increase of capital an improved substitute for almsgiving. For the time being I may be allowed to give a reference to what I have written in the *Dublin Review*, January, 1878, pp. 99-109.

carried across the frontier. And if we go further and seek to trace the indirect and ultimate effect on the national wealth of each payment or each act of consumption, we plunge into a dark sea of conjecture.*

C. We must remember that the future can be sacrificed to the present. It is possible for the inhabitants of a country to convert a portion of their preparatory wealth into enjoyable wealth and for a time to live in delight and abundance till the inevitable day of reckoning comes. They may consume all the harvest, and leave no corn over for seed. They may cease to till the ground, and instead, one-half of the population may keep singing and dancing to the gratification of the other half. Or they may till the ground exhaustively, and draw from it the fertile elements without replacing them. Timber may be felled, and no young trees planted; farm buildings and workshops, roads and canals, may be left unrepaired; no fresh tools and machinery may be getting ready to replace the present ones when worn out; the shops and stores may be emptied; the whole people may be excellently clad and shod and made warm and merry by blazing fires, and no fresh stocks of fuel and clothing prepared. These are fanciful suppositions; but they differ only in degree and not in kind from the reality, and by such extreme cases we can understand how not merely an individual but a whole nation may obtain abundance in the present at the price of penury in the future.

D. The gain of one place, or one class of people, or one trade, may be conspicuous and observed, while losses spread over many other places, and many other classes of people, and many other trades may escape notice. But they exist and may far exceed the gain. Thus in a costly war certain trades as those of army clothiers, gun-makers, or tinned pro-

* Take for example a poor crippled incurable girl. What are the effects of her consumption upon the national wealth? Of course like all consumption the direct effect is a diminution *pro tanto* of that wealth. But the indirect effects, who can tell what they may be or may not be? The desire of supplying this poor creature with comforts and pleasures may be the means of keeping her father or brother sober and industrious, when but for her and her consumption they would have sunk into idleness, drunkenness, and crime, to the manifold detriment of the national wealth.

vision dealers, may grow much in importance, and the social constitution of the country may be such that those engaged in them may grow richer by the war instead of sharing in the general loss. But that loss exists none the less.

E. We are more likely to be misled in a country where independent families producing for themselves are few, and where the bulk of the industrial classes obtain the bulk of what they require for themselves by means of exchange. For the immediate interest of every person in every exchange is to surrender as little and acquire as much as possible. And if one set of exchangers be more noisy than others and are shedding tears over the bad bargains they are making, we may think the whole nation in distress and forget the other exchangers who must of necessity be making good bargains. And we are likely still more to be misled where there exist a large carrying and a large commercial class who make their living by the transport of goods from place to place or by their transfer from one person to another (*sup.* § 116, 117.) For these classes naturally judge of prosperity by traffic, and prefer that the component parts of your dinner should if possible have been carried round half the globe and passed through the hands of fifty different owners, than that they should come from your own farm and no carrier or dealer have got from you a single sixpence. But from the national point of view carrying and exchanging are a means not an end, are cost not remuneration, and are like other costs to be reduced to a minimum.

Some of the foregoing remarks are but illustrations of the wide phenomenon of conflicting interests, a phenomenon that must now be examined, as it explains much that else would be inexplicable.

§ 267. Alas! the goods of this life, how little they are and limited! Alas! how men struggle to seize and hold them and are themselves taken hold of by covetousness! But our business now is not to lament or exhort, but to explain, and shew how, distinct from the opposition of private interests, such as the antagonism of master and servant, lender and borrower, seller and buyer, an opposition can arise in regard to wealth between private and public interest, and how

a few may profit by the calamity of the many, and the many by the calamity of the few.

First, although honesty is said to be the best policy, many think with Autolycus in the play, 'what a fool Honesty is! and Trust, his sworn brother, a very simple gentleman.' In some of the worst cases of dishonesty there is indeed little if any loss directly or indirectly to the national wealth, for example, the use of false weights and measures, and cheating illiterate people in their accounts. Property is transferred but not destroyed, and the transaction occasions no more labour because it is dishonest. But in other cases there is an immediate and great waste of wealth in precautions (*sup.* § 104) and in producing bad articles (*sup.* § 212); while sometimes actual destruction is the interest of dishonesty, as burning houses and ricks or scuttling ships that are over-insured (*sup.* § 102), and the incidental destruction that a house-breaker finds conducive to doing his business quickly and securely. And indirectly there is the loss of wealth that might have been expected to have been produced if all the predatory labour had been usefully employed (§ 104).

Secondly, those whose labour, whether in the highest sphere or the lowest, is not considered as an office and rewarded by a regular salary, but who receive more or less according to the amount of their labour, have an interest in abundant employment; and if there are more competitors in any special calling than are needed (allowing a reasonable amount of work to each person employed), the members of that calling are interested in there being more need for their services, though the country may be interested in their being less. Sometimes an immediate and direct diminution of national wealth is of use to them, as destruction of window panes to glaziers, extreme cold weather to furriers; whereas if a village paid a glazier a regular salary to repair all accidental breakage, he would have no interest in damage. In London the Water Companies charge a sum for supplying water to each house fixed according to the character of the house, not according to the amount of water actually used. They have thus no interest in a waste of water, whereas the sellers of wine have an interest in a waste of wine, as if a sudden frenzy for breaking bottles seized on the

butlers in London. Sometimes the interest is not directly in the diminution of wealth but what leads to it, as the interest (always presupposing the mode of remuneration aforesaid) of a doctor in plenty of patients and a lawyer in plenty of clients, such plenty implying a loss of health and time that if not lost would have promoted national wealth. Of course there are limitations in all these foregoing cases both to the interest and the disinterestedness. The damage must not be so great or so frequent as to lessen the means or discourage the willingness to pay, for example, for glass windows; and to drive consumers to substitutes or abstinence. On the other hand a very great diminution in the use of the article supplied or service rendered by a salaried official, would render his office a sinecure likely to be swept away.

It may be added that the opposition of private and national interest I have endeavoured to explain can be increased by the accumulation of means of production in a single hand, and by the consequent employment of servant-workmen. For whereas, when the workmen in a trade are each independent and each fully employed, they have no wish for any increase in the demand for their produce, no interest in any calamity that may cause such an increase: an employer of workmen, on the contrary, is in a sense insatiable, supposing he is allowed to employ any number. For his remuneration is in the nature (as we have seen) of so much a head for each workman: the more he employs up to the limits of supervision and control, the larger his profit; and thus from the nature of the case he is hungry for the enlargement of his market and for drawing as many workmen as possible into his trade.

§ 268. So much in general concerning the opposition of private and national interest; let us now consider this opposition in particular industries.

In agriculture the works of drainage which may be a gain to the farmers along the upper course of a stream may be an injury to those along the lower course (*sup.* § 81). If indeed the injury be about the same as the benefit, there is no opposition between private and national interests, only between two private interests; but if the injury is less than the benefit, one party is interested in preventing a change

that will be beneficial, and if the injury is more than the benefit, the other party is interested in effecting a change that will be injurious to the national wealth. And a similar opposition may occur in schemes of irrigation, and of altering the climate by planting or clearing. But the great case of opposition between private and national interest can only occur when much land is owned by a single person and at the same time he has the opportunity of exchanging the produce for whatever he desires. Then indeed this person can often gain a larger revenue by having the land, that the law calls his own, cultivated with less intensity; he lessens the number of farms and number of husbandmen; but though the produce is less his share of it is more, and his net revenue increases though the total net revenue coming from that land diminishes, and the nation has fewer inhabitants and less wealth. Thus, to give an illustration in figures. A man finds himself with an estate on which, besides himself, a hundred families are supported, each gaining from the land (as far as we can reduce these matters to a money reckoning) some £50 a year, of which £40 constitutes their net revenue and £10 is paid as rent to the landlord. His net revenue therefore is £1,000, theirs in the aggregate £4,000; and the country as regards this estate can boast a population of 101 families and £5,000 net revenue. Then the landlord finds that by having the land cultivated with less intensity (*cf. sup.* § 68, 72, 111), throwing for example many small farms into a few large ones, producing corn, or wool, or meat, or dairy produce rather for sale than for consumption on the estate, substituting the plough for the spade, or making pasture out of arable land, and using machinery or horse power instead of manual labour,*

* An explanation of this effect of using machinery is given by J. S. Mill, *Principles of Pol. Econ.* I. ch. VI. § 2, and of this effect of using horses by Senior, *Polit. Econ.* ed. 1850, p. 164. But the terminology of both these writers makes their explanation misleading; and Mill leads us to suppose the case could hardly occur in practice except by mistake; while Senior has a palliation characteristic of the evil days he wrote in, that such eliminations of peasants 'seem to be natural accompaniments of a certain period in the progress of national improvement,' and 'the ultimate consequences of the change are always beneficial.' I will give, however, the case he puts, but in other terms. The original

he may increase his revenue by having less got from the land, but getting himself a greater share : and he does it. Fifty families are evicted and their revenue, as far as it came from that estate, is utterly annihilated. The remaining fifty working the new mode of cultivation each gain £65 from the land instead of £50, and keeping £40 as before for themselves hand over £25 to the landlord whose revenue rises to £1,250 (namely £25 \times 50 instead of £10 \times 100). But the country as regards that estate has to mourn the loss of a population of 50 families and a net revenue of £1,750.

§ 269. Alas ! these dry figures are no mere playthings of the fancy, but represent a dreadful reality, a hideous page of history, a piteous tale of ruin and death. But the moral effects and economical antecedents and consequences of such evictions belong to the next book. Here we are only engaged with their effect on national wealth. There is always an immediate diminution, but then, if the outcasts neither perish nor quit the country, the mere loss in wealth may be quickly repaired, and greater intensity in some other district or industry make up for the diminished intensity on the 'cleared' estates. Thus in Scotland many of the evicted Highlanders became manufacturing workmen in Scotch towns. But where the alternative is death or emigration, there, although the moral loss may be but about the same, the material loss is far greater ; of which loss the classical example in modern times is Ireland, where for many years

state of things is that a farmer has 26 servant-workmen, of whom 20 produce the means of living for themselves and the 6 others, and these others produce the means of living and enjoyment for the farmer. The change is that 8 men are dismissed and in their place are put 5 horses, who produce as much as 10 men and consume as much as 8 men. The consequent state of things is that the farmer has 18 servant-workmen of whom 10, with the aid of 5 horses, produce the means of living for themselves and the 8 others, as well as fodder for the 5 horses, and those 8 others produce the means of living and enjoyment for the farmer. We may represent the original state of things by saying the population was 27 families with aggregate net revenue of £1,280, each workman's family getting £40 a year and the farmer £240 ; whereas in the second state of things the population is only 19 families and the aggregate net revenue only £1,040, of which, however, the farmer's portion has risen to £320.

after 1846 the population and the number of acres under crops shrunk up with little intermission, and even the extension of pasture land did not keep pace with the contraction of tilled land, and many acres relapsed into wilderness.*

Analogous to the foregoing process is that where industrial inhabitants are cast out, not because the land is cultivated with less intensity, but because it is not cultivated at all and is converted from a means of production into a means of enjoyment. So of old the pleasure-grounds of the Roman nobility absorbed much of the cultivated area of Latium, and in our own times large regions of Scotland have been converted into deer forests.† All such processes, as well as

* The statistics of so-called 'cultivated area' in Ireland are delusive, because there is no distinction between the permanent pasture, like the grazing farms of Meath, which deserves the name, and land that only deserves the name of waste, where whole acres, once well cultivated, fail to produce grass enough for one sheep (*Dublin Review*, 1848, Vol. 25, p. 303). Mr. Cliffe Leslie, *Land Systems and Industrial Economy*, 1870, pp. 65 *seq.*, notices the tendency of much land if under permanent pasture to run into unprofitable moss; and he gives Dr. Layfair's calculation that in the space of eleven years [1858-1868?] Ireland had lost the power of feeding 1,800,000 of her people or even more. A recent eye-witness tells us that in King's County and West Meath "field after field of first-rate land" is "going down to mere thistles," and that "the struggle is to clear [depopulate] land, which, unlike the barren West, could well support fivefold the present population" (Rev. H. S. Fagan in *The Times*, 16 Sept. 1882). And the following table from the Agricultural Statistics of Ireland given in D. Cunningham's *Conditions of Social Well-being*, p. 92, indicates even on the cultivated area a diminution of intensity or an increase of sterility, as in ten years the weight of cereals produced per acre sank about six per cent, and of root crops 23·3 per cent.

Average produce per statute acre for the ten years ending				Average produce per statute acre for the ten years ending			
		1858	1875			1858	1875
Wheat	. 13'3	...	12'6 cwts.	Mangel-			
Oats	. 13'6	...	12'7 "	wurzel	16'6	...	13'3 cwts.
Barley	. 17	...	16'2 "	Cabbage	13'1	...	10'2 "
Bere	. 16'1	...	15'7 "	Flax	. 35'8	...	23'5 stones.
Rye.	. 17'9	...	10'8 "	Hay	. 1'97	...	1'86 tons.
Potatoes	. 4'93	...	3'24 "	Peas and			
Turnips	. 15'1	...	12'7 "	Beans	13'6	...	17'2 cwts.

† So lively and detailed an account of the Scotch 'clearances' has been given by Mr. A. R. Wallace (*Land Nationalization*, ch. IV. London, 1882) that I will content myself with this single reference.

those others afore-mentioned for the sake of profit, can be given the name of *depopulations*, and their authors can be called depopulators; whose offence our old English Common Law thought so grave as to deprive them of the benefit of clergy, and so contrary to the common weal that even the king could not pardon them; while the Canon Law would not grant the *depopulatores agrum* either the privileges of sanctuary or Christian burial.* But if the peasantry are to be considered as weeds or vermin, the modern term 'clearance' is better than depopulation, and the authors of the process are to be called improvers of estates.

§ 270. In manufactures, if the damage caused by smoke and by refuse to the atmosphere and the streams (§ 81) exceeds the gain from the introduction of a modern factory, the interest of the aspiring manufacturer is in opposition to that of the nation; but if the gain will exceed the loss, it is no longer the manufacturer who is in this unfortunate antagonism, but those whose dwellings, lands, and streams will suffer. Again, wherever the relation of master and servant exists, it can happen that a particular size, place, and method of production is chosen, not because it gives the largest return to all concerned, but because it enables the master to secure for himself the largest proportion of that return. In these cases his pecuniary interests and that of the country are in antagonism. This phenomenon has already been noticed in regard to the size (§ 115) and the locality (§ 131-137) of industry. I am not at all sure that a great part of the industry now carried on in towns might not be carried on with more advantage (I will not say to national morality and welfare, for that is obvious and is not the point in question, but also) to national wealth, if it were in the country. For among other things the great loss of wealth might be avoided that comes from miserable or expensive dwellings. It is possible also, by the substitution of machinery for men, to lessen the total produce of a given factory and yet for the owner to get a larger return. But though possible, I do not think this case of practical im-

* See the learned and admirable article of forty years ago in *The Dublin Review*, Nov. 1842, Vol. 13, pp. 512-560, full of information on 'depopulation' in both England and Ireland.

portance.* Far more important is the opposition of private and national interest in regard to the quality of goods. It is never for the interest of the nation that bad articles be made, supposing indeed they are not meant for exportation and to bring back good ones in exchange. But where manufactures are for sale, not for the maker's own use, his interest is to produce what can be sold easily; and society may be so constituted that, as I have again and again explained (§ 95, 104, 115, 118, 124, 140, 178, 201, 207, 212), flimsy, unwholesome, unsuitable and showy articles may be more easily sold than what is good, and a gigantic waste in production and consumption be the result.

§ 271. In making and working the means of transport some striking instances can be seen of the opposition of private and public interest. I have already alluded to the danger of excess in the intensity of transport (§ 73). The main ground of this danger, I take it, is not so much mistake and miscalculation as regards future traffic and the need of communication, but the fact that a body of speculators, contractors and engineers are interested in the construction of a line of communication, receiving their profit whether the line succeeds or not, and often getting more profit the more costly the line. But the interest of the nation is that only such lines be made of which the benefit surpass the cost, and that these be made at the least cost compatible with efficient transport. Then there is rivalry between different districts of a country, each desirous to get the advantage of being on a main line of communication. The famous petition of some counties near London early in the eighteenth century against the extension of turnpike roads to remoter counties because these would become their rivals in supplying the London market, is an example of opposition of private and national interest, and is akin to the efforts of landowners, manufacturers and town corporations in modern times to attract railways to themselves.

To tell the misdeeds of railway companies in Great Britain, partly mistaken, partly right in their views of what

* The theorem may be found worked out (in their usual perverse terminology) by Mill, *L. c.* I. ch. ix. § 1, p. 168, and by Senior, *Political Econ.* p. 162.

was profitable to themselves, but in both cases opposed to what was for the national benefit, would be long. They have waged war on the canals, buying up important links in the canal system and imposing 'bar-tolls,' hereby driving the canal traffic to the railways. It is possible that even the railways themselves (that is, the shareholders as distinct from the directors, engineers, and active managers) have lost by this transfer, since the traffic in the heavy goods, that used to go by water, is a hindrance to the extension of the lighter, and more remunerative transport of passengers and light goods; but certainly the nation loses much by this suppression of the less costly mode of transport. Then there is the abuse of differential charges (already alluded to, § 127), that is, charging more or less, not according to the supposed cost of transport, but according to the locality or individual, with the aim of securing, each railway for itself, the maximum of traffic. The national wealth indeed would not suffer by differential rates and fares, were all persons and places alike; for the loss to the one would be compensated by the gain to the other. But in fact the extra favour is often given to enable merchandise that else would not reach a given market to get there in spite of disadvantages in production, because in doing so it increases the traffic on the railway. And obviously when goods or passengers are forced or induced to travel by circuitous routes to keep on the line of one company, there is extra cost of transport, which cost is so much waste of national wealth. In short, whereas, *ceteris paribus*, it is desirable for goods to be made close to where they are to be used, men to live close to where they have to work; and transport is only required as a means of avoiding greater inconveniences: it is of itself an end to the owners and workers of means of communication, and the more of it the better they are pleased, though the less of it the better for the national wealth.*

* Some interesting articles on railway traffic are to be found in *Fraser's Magazine*, April, July, and Sept. 1877, and March 1878. See also the *Report of the Railway Commissioners*, 1875, and of the *Select Committee on Railway Rates and Fares*, 1882 (criticized in *The Times*, 30 Aug. 1882); also an article in *The Times*, 5 May, 1883, from which I give the following extract illustrating one form of differential charges:—

"Hops from Boulogne are brought by rail, *via* Folkestone, to London for

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§ 272. The divergence of the material interests of private persons and of the nation is perhaps in no department of industry so striking as in commerce. The nature of commerce as I have explained (§ 117) is to facilitate changes in ownership, the reward of those engaged in it is of the nature of a commission, their interest, that the number of transactions on which they receive a commission be as numerous as possible and therefore that goods change hands as often as possible. But it is the interest of the nation that there should be the fewest possible exchanges consistent with making proper use of the separation of employments. As a fact an immense loss has been incurred by excess in the number of dealers in both wholesale and retail trade. Exorbitant charges indeed are primarily only so much taken out of one man's pocket and put into another's without affecting the sum total of wealth in the country; but the superfluous apparatus of selling and the superfluous application of labour to selling, are a loss, the one direct, the other indirect, to national wealth. I have previously noticed the excess in retail dealing in England that called up a reaction in the shape of co-operative stores (*sup.* § 118); and the speculative dealing in corn, coal, cotton, and many other articles is much of it, as far as any gain to the nation is concerned, labour thrown away; and the same can be said of the labour and property used in pushing, puffing, coaxing, bargaining, befooling, cheating. Such waste may be very great in societies where almost everything has to be sold before it is used. Finally, in the sale of articles liable to abuse and (what is to the point here) by that abuse bringing about soon a diminution of national wealth, there is a grand opposition

21s. a ton; from Ashford to London, which is less than half the distance, they are brought by the same railway for 36s. American cheese costs 25s. from Liverpool to London, while cheese from Chester pays 45s. Between Glasgow and London foreign cattle are charged £1 19s. 6d. per truck less than Scotch, while English and Scotch dead meat is charged 7s. per ton against 4s. and 5s. charged for foreign dead meat. The meaning of these charges is obvious. In the case of foreign goods, whether meat or hops, the railway companies have to compete with water-carriage; in the case of native produce they are virtual monopolists, and charge as much as the law allows them, or they can make the producer pay."

between the interest of the sellers who will grow the richer the more their mischievous wares are sold, and the nation which will grow the poorer. Thus among ourselves and in various other countries of Europe and America can be seen the notable conflict between the publicans on one side and the public welfare and national wealth on the other, a conflict already examined at length (*sup.* § 168-180). In the sale of various narcotics notably opium there is the same opposition of interest only still more violent and obvious (*sup.* § 227). It is much to the advantage of the vendors of trinkets and trumpery to induce poor girls and housewives to buy what they cannot afford (*sup.* § 213): the sale does not diminish the national wealth, only makes the rubbish and the money change hands. But the consequences of the sale, the home perhaps dissolved and the husband imprisoned, assuredly are a loss to national wealth, let alone losses that are more grave.

§ 273. Not the same as, but not altogether different from, the foregoing antagonism between the individual and the nation is another between the present and the future. I say not altogether different, because a nation assumes its own perpetuity and thus is deeply interested in the future, even remote, whereas an individual is mainly concerned with the present; and thus, where individuals are not bound up in solid and lasting families, the opposition of present and future may appear as one variety of the opposition of private and public interests. Already I have spoken of the prevalence and great abuse of exhaustive agriculture; also of using up stores of minerals, and of extirpating useful animals by reckless captures (*sup.* § 82, 83, 141); and I have explained how the enjoyable wealth may be increased at the cost of preparatory wealth, and leisure and abundance got now by diminishing the opportunity of getting them in the future (*sup.* § 266). In the case of a man having the control of property for a short time only, as if he hires a fishery for one year or a farm for seven, the opposition between his interest and that of the permanent owners is so evident, that he is bound by laws, or customs, or agreements, to abstain from the waste to which he is tempted by his situation. But the same temptation in a degree affects the owners them-

selves. Family spirit may be weak ; they may care little for their children's income, still less for their grandchildren's ; or may indulge a convenient belief that the future is too uncertain to hinder them enjoying the present to the full. And thus there may be need of laws against the exhaustive use of the means of production. This applies pre-eminently to forests, on which among the Germans there has been much discussion, some urging that it is folly to preserve forests when by felling them and putting out the proceeds at interest more income could be obtained by the owners ; others denying it. Let us say in brief that the immediate effect on the owner's income of felling a forest and investing the proceeds, can be calculated with some approximation to exactness, by examining the price in money of timber and of securities. But if we look at the family patrimony for a century onwards we cannot foresee the price of either. We can only guess that the price of timber is not likely to grow less, while there are few securities that are not liable to fail altogether. And thus if our calculations are not to be delusive, we must take annually from the apparent profits of investment a serious amount as premium for insurance.

Naturally whatever may be the reckonings of private interest, national interest bids us preserve those woods that make the climate more equable, or attract the needful rainfall, or absorb the needful moisture, or preserve the hill-sides from being washed away, or the riversides from being flooded. But apart from this, I think so many indirect advantages for the housekeeping of the many, and the mental culture of the few, spring from woodlands, that Government in every populous country should take care for their preservation.*

Another case of conflict between present and future is where a temporary sacrifice is needed in order to acclimatize some new industry, a matter already sufficiently explained

* On the *Reinertragstheorie* concerning forests see Schäffle, *National-ökonomie*, II. pp. 206-208, 487, 488, edit. of 1873. Also Roscher, *Ackerbau*, § 187, especially note 12. Some interesting calculations on how it would be profitable to substitute wood for deer or sheep on the Scotch Highlands, are to be found in the *Cornhill Magazine*, Sept. 1882, pp. 344-348.

(*sup.* § 136). Wars moreover, though not always for the sake of wealth, often have the character of a sacrifice of present wealth to secure more in the future, a matter familiar to students of Roman history as well as of contemporary politics. And this brings us to another point.

§ 274. There can be international rivalry in regard to wealth, and the interest of one country may be opposed to that of another. The fertility of the one may tempt the inhabitants of the other to migrate thither with all their moveable wealth, and leave their native land to desolation and decay. How such temptation may be lessened and how men and their goods may be induced to remain in or to enter a country by protective laws, we have already seen (*sup.* § 138, 139). But such laws, though they recognize the diversity of national interest, do not remove it. Again each country gains wealth at the expense of another if it is the residence of those who draw their revenue from that other. A stream of wealth flows in and enables more people to live in the country that receives it; while the native land of the absentee suffers a corresponding loss in wealth and men. I am not speaking of the moral loss and the manifold mischief that non-residence works in the social relations of the deserted districts. For these evils are much the same whether the absentee live abroad or only in some other part of the same country. Thus, to the social relations of Ireland it makes little difference whether a landlord of Connaught live in Dublin or in London; whereas to the national wealth of Ireland it makes all the difference; and if several hundred Irish landlords were transplanted from England to their own country, the population of Ireland would be increased by many thousand souls, her national wealth by several hundred thousand pounds. But the diminution of wealth and population elsewhere would be in correspondence. And what is said of residence can be said with a difference not of kind but only of degree in regard to temporary sojourn, like the annual influx into Wales, the Lake Country, the Scotch Mountains, Switzerland, and all other resorts of tourists. And a truth so simple that no one from the lawgiver, or the statesman to the innkeeper or car-driver had any difficulty in

seeing it, required all the dulness of the dullest of economists before it could be obscured.* It may be added that where the goods sent away without return are bulky agricultural produce, there is a special loss, as the fertile elements of the soil are removed, and to the importing country a special gain, as it can make its own soil more fertile, and can rejoice in the fact and title of *pleochomous*, while the other has to lament being *leiochomous*. (*Vid. sup.* § 82.) And worse as we have seen (§ 140) may happen, and means of support be carried away leaving the inhabitants to starve. This indeed is not only caused by absentee landlords inexorably demanding their revenue, as those out of Ireland at the Famine, but may come from the need of paying foreign creditors, like the Irish payment to English mortgagees, or the Egyptian to French and English bondholders, or tribute to a foreign Government, and may even happen simply by the greed of residents who own the stores of food and prefer to sell to the foreigners, because being rich they can pay a high price, instead of selling to their own countrymen who are hungry but penniless. Various other kinds of opposing interest occur in the course of international trade; and just as the private trader desires to extend his sales whether it is good for the buyer to buy or bad, so the wealth of a nation as a whole may be increased by selling mischievous goods, and forcing or tempting other nations to purchase them, for example our own nefarious sale of opium to the Chinese and spirits to the African barbarians. There are other more subtle oppositions that must be passed over till in the third book I hope to examine in detail the mysteries of prices and trade. It is enough to mention that the present controversies on bimetalism, a matter in itself of only moderate difficulty, have their real ground in the fact that at the present price of silver in gold some nations are profiting others losing by monometalism, and the reasoners are swayed by a secret appeal to their pockets. Lastly when matters come to blows the diversity of interest in regard to wealth appears in all its coarseness and undisguised, in the

* On the matter of absenteeism Senior, *Polit. Econ.* pp. 155, *seq.* ed. 1850, is not on a high level, but is raised several degrees above the depths in which MacCulloch is sunk.

shape of annexation, confiscations, indemnities, tributes, prize money and booty.

§ 275. We cannot then escape the melancholy conclusion that in a world linked together economically and politically, where neither is each family separate and self-sufficing nor each nation, there can be conflicts of interest not merely in regard to power and renown, but also in regard to wealth, between one family and another, between private families and the nation, between one nation and another. But because we recognize this truth we need not exaggerate it ; and think we should be in a paradise if only we could sweep from the earth our noxious fellow-creatures. For we need them ; and among other reasons, for the sake of securing us against the impoverishment that is ever hanging over us. If we have property we may lose it, as by fire, shipwreck, hurricane, earthquake, flood, drought, hail, murrain, insects, or again by depreciation of unsaleable goods, theft, fraud, bad debts, war and violence. And whether we have property or not, we can only labour efficiently in the middle portion of our life, and not always then, so that a large proportion of any population is incapable of supporting or fully supporting itself, and the deficit must be made up by the extra labour of the able-bodied. Seven classes of more or less needy or incapable may perhaps be distinguished with convenience. First children ; secondly, those permanently disabled, as idiots, cripples, the blind, the deaf and dumb, and all who suffer from incurable diseases ; thirdly, those temporarily disabled through sickness or accident ; fourthly, those in want of employment or fit employment ; fifthly, widows ; sixthly, the aged ; lastly, the dying and the dead. The proportion of these seven classes to the able-bodied must, as I have said, always be large, but may under circumstances be permanently less in one country than another. A good economical constitution can reduce the fourth class to a minimum. Sanitary reforms and factory laws if worked well may lessen the third class and the seventh* ; and so far, so good. But whether

* Statistics concerning the health of the workpeople in most trades of the United Kingdom are given by Mr. Bevan, *Industrial Classes*. Excessive mortality is seen among those employed in metal-mining, copper-smelting, steel-grinding, making chemicals and lucifer matches,

they would really much lessen the proportion of incapable population is not all certain; for the aged and children might be more numerous than before.* And we are by no means to be jubilant if we find the able-bodied bear a large proportion to the whole population. We must first ask the cause before rejoicing; for the cause may be a low birth-rate and systematic sterility, few children and consequently (for the rate of mortality is always much the highest among children) few deaths. Or this fine proportion may mean that the able-bodied refuse to support those of the incapable who will plainly never be able to pay them back for their trouble, and thus allow all sickly infants, all incurables, and all old people past work to die without more ado; and rightly, if

scouring pottery, cutting glass (vol. I. 1876, pp. 33-35, 58, 83-85, 125, 126, 135, 136, 177), carding cotton, weaving 'heavily sized' cotton, 'heckling' flax and other processes of flax manufacture, fustian-cutting, tobacco-manufacturing, retailing liquor (vol. II. 1877, pp. 14, 15, 22, 40-44, 112, 187, 193). In most cases proper precautions, in particular proper ventilation, enforced on masters and men, result in lessened mortality. But in the making of white lead the precautions require such elaborate cleanliness as to be hopeless; and the frightful afflictions that come from lead-poisoning seem preventible only by prohibiting lead factories altogether unless the whole of the dangerous work in them is done by machinery. Cf. *The Times*, 17 April, 1883, where there is an article on the Parliamentary Report on lead-poisoning.

* Mr. Hearn, *Plutology*, ch. IV. § 4, urges the great cost of preventible disease and death. He gives Dr. Playfair's calculation that in Lancashire this involves a direct pecuniary loss of £5,000,000 a year, not counting various indirect losses. He notices the great loss of time, generally from one to two years, during which the disease of consumption runs its course; and the calculation that if its prevalence could be reduced by one-third, the mere money value of the service would exceed the interest of the national debt. And we can make all sorts of calculations taking man as a beast or a machine that ought to pay off the cost of its production before it dies or is worn out. See Schäffle, *Nationalökonomie*, § 162, following Engel, and Roscher, *Nationalök.*, § 248. But this view seems only reasonable when limited to the costs of technical education. Here indeed it is right to see that the previous cost is cutbalanced by the subsequent remuneration (*sup.* § 95, 250). But I fail to see the use of such calculations applied to mankind or 'labourers' in general, as though they were so many oxen or swine, and were bred, reared and tended as an industrial speculation for the sake of what they could be made to produce. If men are not beasts it seems waste of time to reason as though they were.

production is the end of life. Only it is not ; and we ought to be glad if in a country there are plenty of children and plenty of old people, and if the incurables are tended with affectionate care to the end of their natural life. Of course there is a limit ; and if war or pestilence swept away all the strong men, a great part of the rest would perish. But this is an abnormal case ; while the matter before us is the normal relation of the capable and the incapable.

§ 276. The associations have been many and various that have had as their object or as one of their objects the protection of the individual against the ill effects of loss of property and of personal incapacity. First and foremost is the family, which even in countries like England and North America, where it binds together so few persons and these so feebly, is still the association that supports the great majority of the incapable population ; and under some economical constitutions is the great resource in all difficulties, being large enough and united enough to support all its members who are in distress—the young, the aged, the sick and disabled, and to bear up against losses of property by spreading the loss over its numerous members, and having a common reserve to draw upon. They can accumulate in the manner already described (*sup.* § 257), and have, for example, a stock of provisions that will last them through a couple of bad harvests, and a stock of timber to renew without delay any building that is burnt down. Where the family group is smaller but still united as it ought to be, it is still sufficient for many personal incapacities, and parents are secure of support in old age if only their children are not cut off prematurely.* But for many calamities the family is insufficient ; and to meet these there can be various associations of mutual help, like the

* Thus of two victims of the spear of Ajax before Troy it is mournfully said of each :

οὐδὲ τοκεῦσιν

Θρέπτρα φίλοις ἀπέδωκε, μινυνθάδιος δέ οἱ αἰῶν

*Ἐπλετο. (*Iliad*, IV. 477-479 ; XVII. 301-303.)

That is, in Lord Derby's version :

Not destined he his parents to repay
Their early care ; for short his term of life.

burial societies of the Greeks and Romans, the innumerable guilds of mediaeval Europe, or the Friendly Societies of modern England. Failing such mutual help there are yet two other modes of escaping hunger and death, namely by receiving either compassionate or speculative help, either alms or bonds. The circumstances of the bondage vary greatly with the religion, laws, and customs of different societies; but this much can be said in general, that one of the chief ways in which a rich class has arisen has been by the service of those who have fallen into distress, like the debtor bondsmen of ancient Rome. When once a rich class is generated it seems a natural duty that as the rich require for their existence a poor serving class (*sup.* § 258–260) they shall afford a refuge for any members of this class who fall into distress. Thus the patrician of early Rome who neglected his clients was marked with infamy; thus too the mediaeval lord was bound to help the distress of his vassals, tenants or serfs. The rich, let us observe, by the very fact of the accumulation of wealth in their hands, are exempt from the danger of distress through personal incapacity: a child, an aged woman, or a man blind or paralyzed, if only wealthy is well provided for; while several kinds of disaster to property can be made light by a contract of *real insurance*. The essence of such a contract under a variety of forms, is that a number of owners of property agree that if certain goods of any of them suffer destruction or damage from certain causes, the loss shall be spread over all, instead of being borne by the particular owner of what is damaged or destroyed. This real insurance can be applied and often is applied very usefully not only to the rich but to all owners of property, though they own comparatively little; and thus is used by the middle classes as well as by the rich. But to meet the dangers of personal incapacity the middle classes, unlike the rich, have not a sufficient accumulation of wealth, and need the various associations such as I have already alluded to, and which in the next Book can be examined in detail. And if family affection, mutual compassion, and religious fervour are deficient, the middle class may with prudence have to resort to the mechanical but useful contrivance of *personal insurance*, that is, a contract by which

the payer of a certain sum periodically, or a certain lump sum, gains the right for himself or for those belonging to him of receiving payment on certain occasions which are likely to be occasions of distress. A conspicuous form of these contracts is life insurance, whereby a man's wife and family are not left destitute in case of his premature death. And with the aid of doctors and statistics a whole art of personal insurance has grown up and adepts in it (actuaries), who can calculate the payments that according to the circumstances of each individual are needful to secure any particular repayment.

§ 277. Where society is diseased, where the family spirit is feeble, its bands dissolved as soon as the young have grown up; or, again, where alms are scanty, or the right spirit of almsgiving is wanting; or, lastly, where the rich neglect their dependants, and a poor workman or petty tenant no longer by his very position has a patron and defender, the lower classes are likely to appear in a sad plight. Sometimes there is a catastrophe and millions perish, as when among the Irish in 1846-48 about one person in every seven died of hunger or its consequences out of $8\frac{1}{2}$ million people, and in portions of India in 1876-78 one in every ten out of 58 million people. Sometimes the poorer classes, or rather the least poor among these, make serious efforts to help themselves and provide against sickness, old age, and the want of employment. So the trades unions, friendly societies, and savings' banks of England. These have done much and have warded off much poverty, in particular the praiseworthy efforts of the trades unions to support the frequent contingency of being out of work.* But precisely for the poorest class these efforts are inapplicable or unavailing. Those who most need to be provided for either will not or cannot use the forms of association and the personal insurance that are fitted rather for a sober middle class and men with some little stock of property than for a proletariat. Le Play has rightly observed (*Réforme sociale*, 5^e éd. ch. 46, § 6) that "The improvident classes, if they are to make an adequate provision by means of friendly societies (*sociétés de secours mutuels*),

* See *infra*, § 279, note pp. 576, 577.

must submit from earliest youth to a discipline and to privations which hitherto have only been imposed by the patriarchal régime or by the ancestral habits of peasant proprietors. Can any one hope then that the young people of manufacturing towns, abandoned as they are without control at sixteen years old to their grossest appetites, will surrender of their own accord their improvident freedom?" Those greatly err therefore, as he observes, who think the modern associations among workpeople have begun a new era of security as well as of independence, and are not rather a mere palliative for a miserable situation, being an indication rather than a cure of the evil. And in a bad constitution of industry these efforts, if they become very common, may by their very commonness be frustrated, and be like pouring water into a sieve. For the more a poor family has accumulated in saving banks, or insurance companies, or friendly societies, the lower the minimum of wages for which they can manage to work and live. But bad as well as good constitutions of industry must be examined in detail in the next Book; and bad as well as good systems of poor relief in the Fourth Book. Here I will only so far anticipate those discussions as to look at certain schemes of national insurance on which great hopes seem to be founded in Germany and England: schemes that aim at the extinction or alleviation of poverty, not from the union of masters and workmen, landlords and tenants, by being bound together in common and religious associations, nor from the union of kindred by strengthening family ties, nor from the union of rich and poor by Christian charity, but from certain well-contrived operations of the police constables and the tax-gatherers.

§ 278. Now there is a certain presumption against such schemes from the fact that already these police constables and tax-gatherers have intervened on behalf of the poor, and have in the main only fostered misery and vice by their intervention. Compulsory relief of the poor has been tried and found lamentably wanting, notably the largesses of the Roman Empire and the poor laws of modern England. And whereas to meet exceptional and abnormal distress the civil power is stringently bound to intervene and save

every life it can, it must leave the relief of normal distress to the charitable, and only endeavour by fostering wholesome relations in the family and the workshop to reduce that normal distress to a minimum. Every one no doubt has a right to bread, or to the means of earning it ; but compulsory poor relief, as a manifold experience shews, quite fails to secure this right, and moreover in the vain endeavour violates other rights no whit inferior.* But it may be answered that the champions of national insurance or some of them, far from denying the failure of previous compulsory poor relief, are enthusiastic in denouncing it, and that the clumsy, stupid, and mischievous application of compulsion in the past is no argument against that enlightened and skilful application of it which they propose for the future. Let us sit at their feet therefore and listen.

In England the apostle of compulsory national insurance is an Anglican rector, Mr. Blackley ; his disciples number among them many notable philanthropists ; they form a National Providence League ; and from the publications of the League, in particular from the collected essays of Mr. Blackley, we can learn our salvation. Every youth and every girl, rich and poor alike, between the ages of 17 and 21, must pay to the National Insurance Club the sum of £10 or thereabouts (being at the rate of fifteenpence a week), and this payment will be sufficient to secure for every-one 8s. a week continuous sick pay, and an annuity of 4s. a week after the age of 70. The money received is to be invested by commissioners on mortgage and public loans : the security of the funds, resting on the nation's guarantee, is complete, and if the £10 is found not enough to provide for the required benefits, it can be raised in the case of every fresh insurer, and the balance of payment and benefit restored. The enforcement of payment will be as easy as other taxes in regard to the great bulk of the population. The recalcitrant few, the youthful paupers, drunkards, and thieves, when caught by the workhouse or prison authorities and found without the insurance card (or certificate that

* What I have merely asserted I hope subsequently to prove. Meanwhile I may refer to what I have written on the subject in the *Dublin Review*, July, 1878.

their £10 has been paid), will be kept at forced labour paid at the lowest rate till they have earned this needful sum. The exceptional case of apprentices, who only begin to earn after the time when the insurance money ought to have been paid, can be met by their being made, as soon as they become journeymen (at the age of 20 or 21), to pay up arrears much faster than if they had begun to pay at 17, and at a slightly higher rate in proportion to the lateness of the payment. The danger of pretended sickness is met by a medical certificate, by the smallness of sick pay, by everybody being interested to prevent it, by inspection, by publication, by a dozen other devices if needful. And those only are to get it of whom the medical certificate states that the sickness or injury prevents the applicant earning his or her usual wages; and the Board of Insurance will decide what is really to be deemed wage-earning, and what not. Thus any one who is really in the receipt of wages, though he have abundance of property and is anything but destitute, has a right to the sick pay if it prevents his earnings. But of course many of these will be above asking for it, and many others as not being wage-earners are not entitled to ask for it; and for these, among other reasons, the National Club is able to charge so little and provide so much.*

§ 279. Such in outline is the scheme. And the blessings that are to flow from it are, in part, summed up by the author and numbered as follows (*Collected Essays*, pp. 34, 35): "(1) It would, at a rate below all possible competition, provide every man against destitution arising from sickness or infirmity. (2) It would make that provision absolutely secure, so far as regards payment of claims. (3) It would also make it absolutely secure on the other side as regards payment of contributions, that being made once for all in advance. (4) It would eventually make every Englishman practically independent of poor-law aid. (5) It would be a measure of simple justice to every man willing to make his own provision, as he ought to do. (6) It would be a measure of immense benefit to the thriftless, thoughtless

* Rev. W. L. Blackley, *Collected Essays on the Prevention of Pauperism*, London, 1832. See especially pp. 11-13, 28, 43, 46, 61, 67, 69-72, 102-104, 141, 143.

boys of our nation, securing them a provision for life, while teaching at least three systematic lessons : firstly, of personal self-denial ; secondly, of individual and social duty ; thirdly, of their own power, in a year or two, to lay up an important sum of money. (7) It would give every English subject a direct money interest in the stability of our institutions. (8) It would, in a few years, reduce our enormous, immoral, but otherwise indispensable poor-law expenditure to an amazing extent, since the universal application of the system would result in the almost total abolition of poor-rates. (9) In proportion as it diminished the rates, it would tend to raise wages in every branch of industry. (10) It would save every Englishman from the disgrace, or hinder him from the dishonesty, of pauperism. (11) The measure could do no real injury to any, and must do real good to all."

But such great expectations from a single measure awaken suspicion and remind us of the irrational confidence of fanaticism, and the boasts of vegetarians, total abstainers, educationalists, Malthusians, ultra free traders, and Socialists. Nor will our suspicions be allayed if we examine this scheme of compulsory national insurance.

A. The mere technical calculation seems vitiated by the omission of two important elements : the inability to exclude the sickly, and the inability to profit, as private friendly societies do so largely, by the lapse of claims through non-payment of contributions.*

B. The calculation of what is requisite for the sick is, except perhaps for the unmarried in some rural districts, much below the mark ; and the pay for the aged scarce more than enough in some places to pay the rent of their lodgings. And thus the first advantage on the list (the 2nd and 3rd are

* Mr. Blackley himself explains the frequency of such lapses (pp. 3-5), and strangely enough makes his calculation (p. 28) from the tables of a Friendly Society from which he has previously shewn there are for every 100 entries nearly 50 withdrawals occasioned by non-payment of contributions. And in a pamphlet by Mr. Randell on *Friendly Societies*, published by the National Providence League, some details are given (pp. 5, 6) of this melancholy frequency of lapsed policies ; e.g. of the premiums paid annually to one London insurance company, namely, £980,575, over £400,000 is paid in vain, as the policies are allowed to lapse.

subordinate to it) is found to be a delusion. The same objections to the scheme would deprive us of the 4th, 8th, and 10th advantages claimed for it; only these are already out of reach because of the following objection:—

C. No provision is made for those out of work; and this, in the state of society to which these insurance schemes are supposed to apply, is a capital objection. Loss of work with no wages for many long weeks is a calamity to which almost all our poorer classes, in our present economical constitution, are exposed; and precisely among the lowest grades, from whom the bulk of 'paupers' come, the average period of being out of work is, I take it, in excess of the average period of sickness. And thus, for them at least, a complete provision for sickness is not even half enough to provide against extreme destitution.*

* Mr. Blackley seems unaware that being out of work is not an exceptional calamity like that of the Coventry ribbon makers or the Lancashire cotton workers during the cotton famine, but is a normal phenomenon in some rural districts at least, and in the towns. He suggests private charity, previous saving, and loans, pp. 72-120. But if they cannot meet the lesser evil of sickness, how can they meet the greater evil of lack of work?—It is curious that Mr. Blackley's chief opponent, Mr. Edwards, does not even mention this capital objection; moreover, by mixing up with some good arguments, several very lame ones, he allows his opponent by knocking over these to gain in appearance the victory.—The want of employment as a normal condition has recently been illustrated by Mr. George Potter. In a letter in *The Times*, 3 October, 1882, he gives the sums paid by certain trades unions during ten years as follows (omitting shillings and pence):

Weekly pay to unemployed	£620,005
" " sick	363,298
Superannuation allowance to aged members	125,603
Paid for funerals of members and their wives	102,660
Paid to members disabled by accident over which they had no control	33,723
Total	1,245,289

The payment to the unemployed had nothing to do with strikes, lock-outs, or any form of dispute with employers. The trades concerned were the amalgamated engineers, the boiler-makers and iron ship builders, the amalgamated carpenters and joiners, and the ironfounders.—In a subsequent letter (21 Oct.) he reckons that a very large number of workmen employed in the building trades are out of work ten or twelve weeks in the year.—Mr. George Howell, in an interesting article

D. A practical impossibility of collecting the money as proposed follows as a corollary from the three foregoing objections (A, B, C). Even were the payment of £10 sufficient, a vast number of youths and girls could not pay it before reaching the age of twenty, their wages being insufficient or their employment interrupted. And every delay after that age raises the sum required. Mr. Blackley, impressed with the spectacle of certain well paid and wicked youths who could well lay by the sum he proposes, reasons as though all others, male and female, could do the same. But a large proportion could not, in particular a large proportion of the girls. And still less would it be possible to extract from our youthful proletariat the far larger sum really needful to secure even the scanty sick pay and annuity

on the Financial Condition of Trades Unions in *The Nineteenth Century*, Oct. 1882, marks the great importance of the 'donation benefit,' that is, the allowance to those out of work amounting to some eight or ten shillings a week, and not granted if the loss of work is due to misconduct, as if a man is dismissed for drunkenness. This allowance is distinct from strike-pay; and, to confirm the figures already cited, I add Mr. Howell's interesting table of the net expenditure of eight trade unions for the last thirty years. The letter A stands for the engineers, B for the ironfounders, C for the boiler makers, D for the steam engine makers, E for the carpenters and joiners, F for the masons, G for the tailors, and H for the blacksmiths.

Society.	Out of Work.	Sickness.	Funerals.	Accidents.	Super-annuation.	Benevolent Grants.	Strikes.
A	1,041,599	441,891	140,135	36,900	215,709	48,927	48,322
B	529,205	132,330	39,355	27,624	56,850	Not stated.	Not stated.
C	134,537	135,479	24,231	8,742	18,759	Not stated.	44,873
D	34,507	25,226	7,977	3,700	8,585	Not stated.	6,996
E	138,040	115,341	21,855	13,500	3,503	10,648	62,889
F	68,073	74,868	58,390	27,758	25,895	5,719	94,630
G	14,846	61,421	23,145	—	39	1,814	16,181
H	18,075	17,072	3,426	2,133	393	Not stated.	Not stated.
Totals...	1,978,882	1,003,628	318,514	120,357	329,733	(?)	(?)

P P

proposed. Instead of the recalcitrant few he fondly imagines, so large would be the number of involuntary defaulters, that compulsion would be impossible, or at least so costly as to swallow up all saving of poor rates, and so invidious, especially in its application to women, and to those supporting out of their earnings their widowed mother or their young brothers and sisters, as to bring all law into disrepute.

§ 280. E. The 'simple justice' spoken of in Advantage No. 5 is very obscure: the appearance of injustice very plain. Our present poor rates indeed are unfair in the way they are levied and mischievous in the way they are spent, and an end should be made to them; but assuredly not in Mr. Blackley's manner by allowing the rich to compound for a trifle and laying a heavy burden on the backs of the poor. The rich are to have no new duty, no new responsibility, and yet are to be freed from a large annual payment. The poor are to suffer fresh pinching and privation, and if the sacrifice is too great or no sacrifice can raise the sum required, they have the alternative of slavery to the money lender,* or to be imprisoned and kept at hard labour like some of the worst of criminals. And all who are straitened in means, in various ranks of life, would suffer by this imposition: the small shopkeeper, the under clerk, the struggling professional man, the poor gentleman, who, the larger their families, would have to pay the more, being already at their wit's end how to fit out each son and each daughter for a suitable career.

F. Nor is the unfairness confined to those who pay. For first a uniform tariff is established over the whole kingdom, and yet the costs of living vary immensely, and if those living in one place get the minimum which is sufficient, those in other places must get either too much or too little. And then, as regards the sick-pay, why should it be confined to wage-earners, while petty tradesmen are excluded? Or if by an arbitrary stretch of language the profits of a small business are included, how exclude the claim of the

* It is almost incredible, but true, that Mr. Blackley, in spite of his zeal against the recklessness of youth should contemplate as part of his scheme their getting into debt—mortgaging their future earnings, *l. c.* p. 98.

whole commercial class, whenever they could shew that sickness caused them any loss?

G. Several other minor objections might be urged*; but let us leave them and confine ourselves to the two chief ones that remain. This scheme is not merely inefficient, impracticable, and unjust, but also socialistic and unchristian. The author indeed seems at the other extreme of doctrine from the Socialists; but extremes meet; and the weapons he has forged against the self-indulgence of the poor can be turned against the rich. For he stands on the same ground as the Socialists. The necessities of those in distress, in particular the sick and the aged, are to be met, not by almsgiving, and family union, and fatherly care on the part of the rich for all their workpeople, servants, and tenants, but by the strong arm of the State. It is true he uses the phrase *national insurance*, and protests against describing his plan as a matter of government interference or State provision (pp. 41, 42). But this is sophistical; for compulsory insurance without government interference is a contradiction in terms; and the point is that instead of the almoner, the kinsman, and the master, he refers us to a public official: to the official we have to pay, and to him in our need we have to go.

§ 281. Now when we have got thus far we are already in the hands of the Socialists, and Mr. Blackley's arguments are only fit to give them laughter and triumph. He reiterates the injustice of the idle and self-indulgent being supported by the laborious and thrifty: the disgracefulness and dishonesty of workmen spending their surplus wages in their youth on beer and tobacco, and then in sickness and

* He is at great pains to answer the objection of the risk of loss by malingering (pretended sickness), *l. c.* pp. 22, 23, 69-71, 102-104, and seems to forget that what is every one's interest is no one's interest, and not to see any risk in raising the medical profession to such a position of power and responsibility; though I do not say it might not be possible to devise precautions against this and other abuses, such as the forgery of insurance certificates. How he can expect the rich to refrain from claiming what they can get, notably their annuity in old age, is not clear, as on his own shewing (pp. 25, 26) it is to be no more demeaning than drawing one's own money out of one's own bank. His notion of his plan having a tendency to raise wages indicates that he is a victim of the superstition of the 'wage-fund.' On which superstition see *infra* § 308 and Appendix E.

old age using their legal right to parish relief, their legal right, that is, to be fed, clothed, and sheltered: and does not see that the same can be said of the idle and luxurious rich, only that they do not wait to be sick or old to use their legal right to be fed, clothed and sheltered, but shamelessly make use of it all through their youth and health; besides causing more toil and sweat to support each of them for a day than is needed to support the most improvident of old paupers for a week.* Our author is eager to clear every one from "the degrading consciousness that he is living on the earnings of his hard-working fellow-men" (p. 14); and does not see that, since every rich man must from the nature of things be living in this way (*sup.* § 258-260), he is denouncing the rich as heartily as any Socialist could desire. He would have every one compelled "to bear at least his own share in the burden of natural providence, instead of allowing him to cast it on the shoulders of others" (p. 7); and is indignant at the idea of gentlemen's sons being exempt from "a share of burden which all poor men have to bear" (p. 97): and does not see that the same compulsion which begins apportioning burdens to shoulders cannot stop till it has set straight the anomaly that a carman working twelve hours a day receives only twenty shillings a week, while that fine fellow there in those fine clothes working not one hour on any day receives two thousand shillings. Mr. Blackley strains out the gnat of poor men's self-indulgence, and swallows the camel of rich men's luxury and licentiousness. Why are only the youth of the poor to be taught self-denial? Why squeeze from them or their parents a part of their hard-earned wages instead of assuring them the very benefits proposed by a levy on the rich? How answer even further demands? What are we to say when for example a delegate from Birmingham tells us at a Poor-Law Conference (*The Times*, 7 Dec. 1882) of "the marked

* It is curious to notice how Mr. Blackley says or implies over and over again that all or at least the great mass of the ratepayers are honest, provident, thrifty, and frugal. He may deceive himself, but he cannot deceive the working classes who are *not* of the opinion that because a man is rich he is therefore honest and self-denying, and who *are* of opinion that poor rates in the main are a contribution of the rich towards the support of the poor in distress.

ill-feeling of his townsmen towards a limitation of out-relief," and that "the general feeling in the town" is that every man who falls out of work shall have out-relief? Or when a few days later (*The Times*, 13 Dec. 1882), at a coroner's inquest in Bethnal Green, the jury denounce in their verdict "the unfeeling treatment and cruelty on the part of the parish," because the parish authorities had applied the work-house test to an old woman, who then unfortunately killed herself? Now there are only three answers that are of any avail against such demands and such clamorous exhibition of general feelings. The one is to bid the complainants be silent and mind the gallows; the second is to yield and enter on a course of socialistic legislation; the third is the theological answer which I have already sufficiently explained (*sup.* § 149, 150, 261), and which may imply great changes in the laws or may not, according as the laws do, or do not, foster irreligion, undutifulness, and extortion. Mr. Blackley's principles—it is plain enough now, but it shall be made still plainer presently—forbid the third answer; he cannot use the first, because he has appealed to justice and reason; and thus, though he stick fast himself in a mire of sophistry, he cannot hinder his arguments leading others to that second and uncomfortable solution of the problem of poverty and discontent. In Germany compulsory national insurance has already appeared evidently as a sop to the socialistic Cerberus. For in the notable Bill brought forward by the German Government in the spring of 1881 insurance of workmen against accidents was to be obligatory and the State was to pay one-third of the premium when the workman's wages were not over 750 marks (about £37) a year. The Bill indeed was rejected, but the doctrine had been promulgated that it was for the State, divine and omnipotent, to take a part at least of the cost of workmen's insurance on itself; and that what was to be done in the case of accidents could be extended in due time to sickness and old age.* Nor could logic prevent the further extension of

* See the interesting account of the origin and progress of this Bill given by a member of the German Parliament in *L'Association Catholique*, Août, 1881, pp. 198-214. Also *Christlich-soziale Blätter*, 1881, pp. 433-445.

State Aid to every man and woman out of work or in any situation of distress.

I think then I am justified in denouncing Mr. Blackley's scheme as leading to socialism, and that we can say the same of other schemes of the sort, even though they be more moderate and practicable.*

§ 282. H. Finally the scheme in question is in its root and in its branches unchristian. For its author does not sound the praises of holy poverty, and tell us how submission, obedience, and dependence are suited to the condition of man, nor bids us bear one another's burdens; but teaches us that pauperism is a disgrace (p. 35), that it is dreadful to die a beggarly death (p. 86), that every honest man longs to be independent (p. 139). Provide for yourselves; do not talk of filial piety; do not trust to your children; put money in thy purse; above all things do not be branded as a pauper, do not sacrifice your manly independence (p. 120); I say, put money in thy purse; this is true piety; it is wicked to be improvident; it is our national sin. Ah, "for dear independence sake" do your "Christian and

* Thus Mr. H. S. Tremenheere's scheme of compulsory insurance, limited to the inspected wage-receiving class (both in fields and factories), one-twelfth of whose wages is to be deducted till they reach the age of 21, to secure them 5s. a week sick-pay and 5s. a week annuity after they are 65 (*Nineteenth Century*, Aug. 1880), is free from some of the failings of Mr. Blackley's; in particular the actuarial calculation is probably correct. But it is utterly insufficient even for the sick and aged; gives no help to those out of work; and leads us to socialism almost as quickly as Mr. Blackley's route. Equally socialistic and more mischievous because directly inciting to immorality is Schäffle's darling scheme of compulsory insurance, according to which every husband would be compelled to make a provision for his wife, every father for each child, by paying a compulsory premium to a public insurance office, and also insuring himself against sickness and old age (*Nationalökonomie*, § 332). Naturally on Malthusian principles mere provision like that recommended by Mr. Blackley would be idle and soon impossible without some such provision as Schäffle proposes, and of which he boasts that it would be a powerful check to over population. How false are the principles on which this as all other Malthusian schemes rest, will appear in the next chapter. Here it is enough to notice that although Mr. Blackley is not involved like Schäffle in this error, both are alike in their neglect of the doctrine of filial piety; both bid us look to ourselves and provide against a desolate old age, implying that we are not to trust to our children to burden themselves with our support.

social duty," and lay by a few shillings week by week (p. 134); put but money in thy purse. "The Have-something is better off than the Have-nothing" (p. 143); fill thy purse with money.*

But are Christians then never to make provision for the future? And am I holding up for admiration those 'thrifless, thoughtless boys of our nation' to whom Mr. Blackley's, scheme is to be such a benefit (*Advantage No. 6, sup. § 279*)? Not at all. It is indeed right for a great many of us to look to the temporal wants of the future, but in the right way and with the right motives. And those boys are indeed in much need of reformation; only not by instilling into them the doctrine of self-help, and independence, and avarice, and selfishness, but by teaching them to help others, and be industrious for the sake of their parents, and to serve God, and in obedience to Him to bridle their passions, and obey the laws, and be grateful to their benefactors. Nor if these youths with the great mass of the poorer classes seek their happiness in the only way the great mass can reach it, in contentment, in religion, in the joys of family life, in parental and filial, conjugal and fraternal affection, need we be anxious about "the stability of our institutions"; whereas, if they are to be egotists, they had better be stupid and indolent egotists than active and crafty, lest it occur to them that the simplest, shortest, and sweetest method of self-help was to help themselves forthwith to our property and power.

§ 283. Compulsory national insurance, then, cannot any more than any other mechanical contrivance heal the social maladies that come from lack of religion, from disintegrated family life, and from industrial anarchy. But, as I have already tried to explain (*sup. § 276, 277*), both real insurance and personal insurance are contrivances that may be very useful, though they can certainly be abused, and though their prevalence may indicate something amiss. How they

* Did we not know by experience that no distortion of Christian doctrine was too wild, no interpretation of Scripture too ridiculous for heretical perversity, we might be astonished that an Anglican rector could have preached such a sermon as that of Mr. Blackley's on National Improvidence, reprinted in his *Collected Essays*.

can be abused is seen from the number of fires, not merely compensated, but caused, by the fire insurance,* and notably among ourselves from the still more scandalous abuses of marine insurance causing the loss not merely of property, but of the lives of many unfortunate seamen.† To insure the lives of young children offers a temptation by no means always resisted to neglect them in sickness, or to be guilty of something worse than negligence. The ease of securing an annuity in old age may encourage us to neglect our children, or to live a life of self-indulgent celibacy like those Beotians joined in clubs for perpetual feasting, of whom Polybius (20, 6) tells us, or like the French tax-farmers, described by Adam Smith (V. ch. III. p. 417). But the abuse of insurance does not take away the use. Wise laws and regulations can remove some and lessen others of the abuses; good can come out of evil; and the art of insurance, which could scarce have reached its present development except under the pressure of disorganisation and misery, can now be used with great advantage by those who seek to bind together owners and workmen, masters and servants once more in Christian associations.‡ And even savings' banks,

* Some unpleasant information on this subject is collected by Roscher, *Nationalökonomie*, 10th edit. § 237^b, note 2. He refers to *The Athenæum*, 2 Nov. 1867, for the calculation that in London at least one-third of the fires are set alight on purpose.

† See *The Times*, 11 to 14 January, 1876, for a discussion on marine insurance, 'Subsriptor' and 'Merrifield' being on one side, 'J. L. W.' and 'A. B. F.' being on the other and apologetic side. See also 'Nemo's' letter, dated 28 Feb., in *The Times* about 1 March, 1880.

‡ A number of rules of art (technical maxims) might be collected like the following. Let personal insurance be extended over several trades lest a calamity affecting a particular trade cause a failure of the insurance when most needed. The same applies to people's banks. Let liability be limited so as to enable rich and poor to join together in associations; otherwise the more a man had, the more he could lose without any compensating advantage. Let the transfer of shares or extension of membership be subjected to proper control, lest untrustworthy members lessen the security or speculative investors get the upper hand. Let there be no forfeitures for non-payment, but equitable repayment or fresh start (new policy) for those who are going far away, or who cease to pay their premiums. But the great point is that the associations be neither the work of the Government, nor merely business associations without any higher ideal or aim, nor composed only of the lower classes,

though unimportant compared with insurance, are of use in a society where houses and house-ownership are of such a character as with us (*sup.* § 187, 188, 190 *seq.*), and furniture and clothing of such a quality as to be little fitted for accumulation (*sup.* § 201, 202, 207, 212, 213), and where usurious pawn-shops abound, and where but few of the lower classes are owners of means of production, nor even these few secure in their ownership. Naturally in happier circumstances where these classes could make their accumulations in the shape of acquisition of live stock (pigs, poultry, goats, cows, oxen), or improvements in their land and farm buildings, or increase in their stock of utensils, furniture and clothing, or enlargement and improvement in their dwellings: there would be little occasion for savings' banks.

§ 284. The abstract and general question of what is excess and what is defect in accumulating wealth and in making provision against impoverishment, need not now be discussed. For the answer can partly be drawn from what has already been said on the use of wealth in general, on necessities, decencies, luxuries, and ornaments. and on the duties of the rich (*sup.* § 146–150), and must partly wait till in the next Book we consider the doctrine of the family. Here let us rather notice the fact that not merely among individuals can there be excess or defect of the desire of accumulation and care for the future, but among whole races and classes of people. Excess of prudence and toil at the cost of happiness and culture, of gentleness and generosity, was, I think, a characteristic of the richer Romans before the second Punic war, and has been conspicuous among the English and Scotch middle classes for a century and more past; had it not been so in the time of Adam Smith he could hardly have taken the view he does (Bk. II. ch. III. p. 151) of the great predominance of parsimony, and looked on bankruptcy as “perhaps the greatest and most humilia-

nor even, though including rich and poor and having ideal aims (like the gigantic association of Freemasonry, with its revenue of many tens of millions of pounds, and its mysteries, very bad indeed, but still mysteries), yet not connected with special industries in particular places. Much rather, if they are to be of serious influence for good, they must be the corporative and religious union of masters and men, rich and poor, in particular trades and particular localities.

ting calamity which can befall an innocent man." Mill, in the earlier editions of his *Political Economy* (IV. vi. § 2), spoke sharply of the dollar hunting of the Americans; and there are, I believe, great numbers of French peasants, sordid and avaricious, among whom prudence and parsimony are almost vices by their excess. On the other hand there can be defect, such as is common among degraded races or classes, and occasional reckless self-indulgence alternates with habitual penury. This has often been observed among savages (examples are given by Roscher, *Nationalökonomie*, § 45, and note 5, and by Mill, *Principles of Pol. Ec.* I. xi. § 3), and can be observed nearer home among the proletariat of great cities.

But let us remember that often the recklessness is merely seeming, and that the father would be only too glad to lay by for the children did he not know well that whatever is got, or at least is known to be got, above bare necessities, will be seized by another. So the notable case of the Irish peasants who dared not, till of late, change their hovels into cottages lest this indication of wealth should be used as an excuse for extorting more from them under the name of rent. Where such conditions prevail, inasmuch as the poor cannot provide for the future or lessen their poverty, they do not deserve the smallest reproach for not making the attempt (Mill, *Pol. Ec.* II. 9, § 3). Government can also effectually hinder accumulation, and Mill (*l. c.* V. viii. § 2) denounces the barbarous despotisms of the East, "where taxation consists in fastening upon those who have succeeded in acquiring something, in order to confiscate it, unless the possessor buys its release by submitting to give some large sum as a compromise." But he does not add that, likely enough, there will be a notable difference between the effect of such a government and the private oppressors aforementioned. These keep the poorer classes in abject poverty and physical degradation; but that government may by no means hinder their material condition being good; what it hinders is any one rising out of mediocrity, any accumulation of wealth in few hands. A hedge is kept bushy beneath by pruning the luxuriant shoots at the top, and the 'barbarous despotism' may prevent the development of a set of private extor-

tioners.* So different sometimes are results from anticipations ; so disastrous sometimes are changes that are thought to be reforms ; so likely that every technical advance, as skilful in place of rude methods of taxation and an efficient in place of a feeble Government, be turned, for lack of a corresponding moral advance, into an instrument of oppression ; so vain all accumulations of wealth without religion to keep the heap from rottenness.

* Bulgaria, under Turkish rule, was a notable illustration of prosperity of the poor under such a system of taxation. Mr. Barkley noticed the wretched breed of horses, unimproved as it might be by crossing with the Arab breed, for fear the animals might become worth carrying off by the Government (*Between the Danube and Black Sea*, p. 31). But the same writer gives abundant testimony of the material well-being of the Bulgarian peasants. No private oppressors could arise, and the burden of corrupt or rapacious officials was light compared with the burden of an irreligious or pharisaical upper class that weighed down the poor under many 'better' Governments (*ibid.* preface).

CHAPTER XIII.

POPULATION AND PROGRESS.

Possibilities on the Increase of Population, § 285—Chief Causes of Increase or Decrease of Population: Death-rates, § 286, 287—Birth-rates, § 288, 289—Immigration and Emigration, § 290—Results of the Causes Affecting Population, § 291—Ideal of Population, § 292-294—Meaning of Over-Population, § 295—Distinction of Famine from Over-Population, § 296, 297—Artificial Limitations to Population, § 298, 299—Errors on Population: Anti-Malthusianism, § 300—Malthusianism, § 301—Alleged Proofs from Ireland, India, and England, § 302-306—Grounds of the Prevalence of this Error, 307-309—Economical Darwinism, § 310, 311—Civilization and Progress, § 312-314—Conclusion, § 315.

§ 285. What is possible, what are we to expect, what are we to desire, concerning the number of inhabitants in any country and the proportion there of the young to the old and of the married to the unmarried? And how are we to account for the contradictory views on population and the prevalence of error among men both intelligent and learned? These questions have in this chapter, as best I can, to be answered.

The possible rate of the increase of a people is a matter of physical science, and in the healthiest country with the utmost abundance of food cannot much exceed, according to a sober calculation, a yearly addition of three persons to every hundred; at which rate of increase the numbers of the people would be doubled in some twenty-two years.* But the possible number of inhabitants in any country is not simply a matter of physical science, because the country, like England or Holland, may be the residence of many

* See J. E. Wappäus, *Allgemeine Bevölkerungsstatistik*, 1859-1861, I. pp. 91-93.

who draw their revenue from elsewhere. But this obviously cannot apply to all countries ; and if the whole world were fully explored, its utmost possible population might be calculated by the joint labours of the physical geographer, the chemist and the physiologist. Of course the estimate could only be rough ; and would have to be enlarged at each improvement in the arts of production. Of course also the maximum aforesaid supposes two things, first that every known improvement be adopted, and secondly that no single person receives more than enough to keep him in health and strength. But it might be possible to calculate other maxima on the supposition of various degrees of technical knowledge and skill and various degrees of inequality,* and to fill pages with figures. But such speculations are little to the purpose ; and I will only briefly repeat some of our previous conclusions that bear on the matter. We saw in the second chapter of this Book that in any state of the arts there were limits to what could be produced in any given space and time, and that after intensity of production had reached a certain point, each fresh increase of intensity must give less proportionate return, till at last the point must come when to get more would no longer be worth while, because the cost of getting it would swallow up the remuneration, and that finally no more could be got at any cost. From this it is obvious that in any given state of the arts the number of persons who can be supported from a given area is not indefinite, but after a certain number has been reached each fresh increase requires more proportionate toil, if they are to live, till at last the limit of numbers is reached, when namely the returns of the fresh toil are not enough to keep the fresh labourers alive. Further we saw in that and the following chapter the advantages coming from improvements in the arts of produc-

* Roscher, *Nationalök.* § 239, nt. 2 cites the formula of Courcelle-Seneuil that le chiffre nécessaire de la population (est) égal à la somme des revenus de la société diminuée de la somme des inégalités de consommation et divisée par le minimum de consommation. $P = \frac{R - I}{M}$. Thus if the annual revenue were a hundred million pounds, the inequalities of consumption fifty million pounds, and the minimum consumption ten pounds, the population would be five millions.

tion, from training, and from concerted labour; and how great were these advantages. But we saw also that men could not be trained indefinitely or co-operate beyond a certain measure, and that technical progress (improvement in the arts of production), though not so obviously limited, yet is limited, and as a fact has had to compensate for various drawbacks and for various injuries inflicted by man on the physical world; moreover, that the great change from the empirical to the scientific stage has in certain places and arts already occurred. How great an increase there can be in the possible numbers of mankind from their having the advantages aforementioned to make use of, is plain; but equally plain that these numbers cannot be indefinitely increased either in any particular country or in the world as a whole. But enough of these theoretical possibilities. Let us look at facts and probabilities.

§ 286. The increase or decrease of the population of any country is of course the result of four factors, the death rate, the birth rate, immigration, and emigration. All these factors are variable quantities. Let us look at the chief causes of their variations.

(a) Natural Mortality, that namely which results from infantine or senile weakness, can be so small as to allow the annual death rate to sink to about 1 in 57·7 (Wappäus, *l. c.* pp. 230, 231), that is, about $17\frac{1}{2}$ in the thousand.

(b) Mortality by disease unlike natural mortality is subject to great variations, not merely between healthy and unhealthy seasons and between years marked or not marked by epidemics, but between long series of years, between different districts, towns, races, classes and countries. Already we have glanced at this diversity (*sup.* § 88) and seen how great may be the mortality among a race not yet habituated to a new disease or a new climate, but that apart from this, there was no evidence of one race being healthier than another. Inefficient medical skill and science, the want of a proper medical service, feeble or ignorant sanitary police measures, unhealthy habits of life, in particular a careless or irrational mode of treating infants, may cause great mortality through disease;* and the amend-

* Among the negroes in Dutch Guiana there is, according to W. G.

ment in these matters among most European races in the last two centuries has caused an undoubted decline of the death rate, and has been able, in Great Britain at least, to do more than counterbalance the unfavourable influence of the relative increase of the town population. In particular the organization of quarantine has acted like a wall against the inroads of pestilence. But we must not rashly conclude that adults are healthier or more long-lived. For in many countries there has been a diminution of the birth rate, and wherever this happens, although sanitary science and practice remain unchanged, an apparent improvement will appear in the statistics of mortality, because so large a proportion of deaths are among infants.* And medical science may preserve in life for many years the sickly and suffering who would else have died long before.

(c) Mortality from famine, in which should be included the deaths due to famine fever as well as to actual starvation, may decimate and more than decimate the inhabitants of a country, as we see by recent examples. This cause of death must be examined presently more in detail.

(d) Mortality from accidents and natural disasters may be large enough to affect appreciably the death rate. Among ourselves and other seafaring nations the deaths from shipwreck are an item worth reckoning, among the Hindus

Palgrave in *The Fortnightly Review*, April, 1876, pp. 553, 554, great infant mortality through the folly and carelessness of the mothers ; who when hot and tired give their infants the breast or leave them without food to go themselves and dance : and who trust to quack doctors and superstitions. Formerly when the negroes were slaves, the masters appointed one or more 'mamas' on every estate, namely elderly women to watch over the infant negroes and see they were properly tended.

* "It is quite uncertain," Roscher well observes, *Nationalökonomie*, § 246, note 1, "what conclusion we are to draw from the average age of the living being high or low. A high average can just as well come from a high death rate among children as from a low death rate among adults ; and a low average can just as well come from a relatively high birth rate as from a relatively short duration of life. Equally ambiguous is the average age at the time of death. An increase in it may be a good sign if it is due to the mean duration of life in the nation being prolonged. But there would also be an increase year by year in the sad case where no more births occurred, and the nation was gradually dying out in consequence."

deaths from snakes and tigers; in some regions floods, or earthquakes, or eruptions, or avalanches. Thus the great earthquake at Lisbon must have raised the average Portuguese death rate for the decade or even the half century in which the fatal year found a place.

§ 287. (*e*) Violent death is perhaps the most variable of all the items that affect the death rate. It may be almost absent for many years throughout vast regions, while in a war of extermination it may sweep away almost the entire population. There are many forms of violence. The most repulsive into which degraded man can sink is cannibalism; this can go so far as seriously to affect the numbers of the savage races. Thus the Fiji islanders, when the British authorities stepped in, had reached a state in which they were literally eating each other up. Among the Aztecs who had supplanted a more cultured people, human sacrifices consumed annually many thousand victims (Roscher, *Nationalök.*, § 244, nt. 6). Sometimes murders may be so numerous as to affect the death rate, in particular, the murderous raids of pirates and slave hunters—whole regions in Africa have been depopulated by the slave trade—and wholesale executions as in the reign of Henry VIII. when the victims of the executioner numbered over 70,000. But the two chief forms of death by violence are slaughter in war and infanticide. Already I have spoken of the difference in different wars in their effect on people and property (*sup.* § 102, 103). We have to distinguish between the actual slaughter in the field, the massacre of non-combatants, the deaths from famine and famine fever through the ravage of the country. A belligerent can carry on warfare abroad and its population be scarcely affected, for it is the seat of war that suffers. In recent times the wars in which the loss of life has been greatest have been the Civil War in the United States causing the loss of a million lives in five years, the equally destructive invasion of Paraguay that ended in the year 1870, and the Taeping rebellion in China that in the space of some fourteen years (1850-1864) swept away many million victims. For the first forty years of this century the population of Spain was kept from increase by foreign invasions and civil wars. The German States

took perhaps a hundred years to regain the numbers they had lost during the Thirty Years War, and several centuries passed before France was as populous as she had been at the beginning of the fourteenth century before the English wars. The other chief form of death by violence, namely infanticide, so frequent among degraded savages, among the cultured Greeks and Romans of antiquity, and as regards female infants among the Rajputs and Chinese, is hardly capable of exact figures, but can be conjectured in many cases to have seriously raised the death rate.*

§ 288. (f) The number of marriages is one of the two main causes that immediately affect the birth rate (the other being the fruitfulness of marriages). The following appear the main influences checking in any given country the number of marriages. 1. Disproportion in the number of the sexes through migrations. Thus in England there is excess, in Australia deficiency of women. Polygamy may be considered as virtually causing a disproportion of the sexes;† and the same may be said of the prevalence of eunuchs. 2. A low proportion of those of the age when marriage is most frequent. This happens mainly where many young people, as in Switzerland, leave the country to get their living elsewhere. 3. Difficulty of procuring a revenue large or secure enough to support a family. This prudential check to marriage is conspicuous for example among the younger sons of the English noblesse and certain races of peasants. 4. Disinclination to marry through misogyny, or eagerness in some pursuit to which a family would be a hindrance, or the charms of a vicious celibacy. 5. Religious motives, like the Buddhist monks, Vestal Virgins, Brahman

* The extent of the evil formerly in parts of India may be gathered from the fact that in one tribe in Kutch or Kathiawar the number of female children was only one-sixth that of males (J. M. Ludlow, *British India* 1858, II. p. 77), and there was a tribe of Rajputs found without a single female (*Ibid.* p. 137).

† Male births on an average are more numerous than female the more the husband's age exceeds the wife's; but only young women are as a rule chosen by the polygamist; therefore polygamy actually causes a disproportion of the sexes by causing a preponderance of male births; and thus we see an importation of women into polygamous countries. (Wappäus, *l. c.* II. p. 170.)

ascetics, and other pagan examples, above all, making other examples insignificant, the celibacy of the Christian clergy and Religious Orders. 6. Legal restrictions to marriages, notably forbidding them in certain posts or employments, as in some countries among soldiers, officers, or civil servants ; charging heavy fees for licences ; requiring the ownership of certain property or the consent of the commune or of some individual. This last is the case of slaves. But for our present purpose a permanent union must be considered as a marriage, though invalid at law ; and thus for example a large proportion of the offspring of the Roman slaves are to be counted as born legitimately, though the Roman law recognized no marriage among slaves. Also many of the unions in countries with vexatious marriage laws, because the unions are meant to be permanent marriages and the children to be, where it is possible, made legally legitimate (*per subsequens matrimonium*), affect population in the same way as legal marriages, and quite in a different way from vicious and temporary unions ; and in fact have a better claim to the title of marriages than many legal unions in countries where divorce is common.

Among influences on the other hand fostering marriage over and above the natural inclination, we may reckon laws inflicting penalties or laying heavier taxation on the unmarried ; grants out of public money to poor couples to enable them to marry ; employment given to married workmen in preference to single ; increase of wages given by employers on marriage ; absence of comfortable homes for young unmarried men, as when in some agricultural districts of England they can get no lodging except at a public-house ; the desire to profit by the wages of wife and children, a powerful inducement in Great Britain to marriage among the manufacturing population before the Factory Laws were made efficient ; religious motives of various kinds, such as the desire of marriage as a preservative against vice, or the belief so firm and so wide spread that the dead require for their welfare to have living descendants to perform repeated obsequies (*sup.* § 247).

§ 289. (*g*) The fruitfulness of marriage, that is, the number of children on an average born to each married couple, varies

much in different periods and countries, and among different races and classes. There seems, as we have already remarked (*sup.* § 88), no good evidence that either race or climate is the cause of these variations, and we must therefore look for other causes, of which the following seem the chief. First, the average duration of married life may be short, either from marriages being often late in life, or from the frequent premature death of husbands (as in civil war) or wives (as in childbirth), or from the frequent dissolution of marriage by divorce. Secondly, the period of suckling may be prolonged, as among various savage races to the third, fourth, or even fifth year after childbirth (Roscher, *Nationalök.*, § 244, note 3). Thirdly, women may be habitually exposed to such hardships as to lessen their fecundity, like the Dyaks of Borneo, where the women from the age of nine or ten till extreme old age have every evening an hour's work in pounding rice with a heavy wooden stamper, and other hard work in the day, notably to carry heavy weights; and thus in spite of early marriages, abundant food, and healthy climate, there are few children to each marriage (A. R. Wallace, *Malay Archipelago*, 7th ed. pp. 90-92). Finally, immorality may be all powerful in lessening the fruitfulness of marriages. It is not necessary to enter on any disgusting details; it is enough to notice that there can be much immorality (as in modern England and Prussia) and yet a high average number of children to every marriage, because immorality is not habitually used as in ancient Greece, modern France, and perhaps New England, as a means of limiting the number of children born. Where not so used, immorality acts on population, I think, more by increasing on the one hand the death rate, for it is a fertile source of disease, and on the other hand by creating a distaste for marriage.

(4) In reckoning the birth rate we must of course take account of the number of children born from irregular unions. I do not say illegitimate children, because this term may be used to include the offspring of unions which are regular and permanent, though unrecognized by law. But I am speaking of irregular unions that imply shame and immorality, or the shameless degradation of savages. And I think we can say that the larger the number of such children

born to a given population, the smaller the probable birth rate, and the higher the probable death rate.

§ 290. Concerning some of the immediate causes of immigration or emigration the following points may be observed.

(j) The attractiveness of a country to emigrants depends on a number of circumstances, notably the facilities of reaching it, the ease of getting a living when there, the climate, language, religion, government, absence of the burdens and restraints that are most felt at home. How different are the attractions of different countries may be seen by statistics of emigration shewing the concentration of emigrants in certain regions such as the Central and Western States of North America or the Argentine Republic, and the neglect of other regions. Governments have often sought to attract emigrants, as Rome and Athens in their early days, Prussia and Russia in the eighteenth century, and modern colonial States; and have used various means for the purpose, such as exemption for a time from taxes, or military service, or local jurisdiction, grants of land, and payment of the cost of the journey.* It is to be noticed that emigration by no means only flows into thinly peopled lands, but rich countries may offer attractions to emigrants akin to those offered by great cities to the rural incomers (*sup.* § 129-132). Thus for years past there has been a great emigration from Ireland and Germany into England and from Belgium, Switzerland and Italy into France, the emigrants in both cases mainly settling in towns.

(k) Compulsory migration has often been resorted to in order to supply the deficiency of voluntary immigrants. The carrying the Jews into Babylonia, and the Eretrians into Persia, are examples of one kind of this immigration; the carrying negroes, Chinese, 'coolies,' and Polynesians into the lands of European planters, is another; the transportation of malefactors or malcontents to penal settlements, as once to Australia, and still on a gigantic scale to Siberia, is a third.

(l) The converse to attractiveness of the foreign land is

* Roscher, *Nationalök.*, § 256, has some interesting remarks on the efforts of Russia and the German States at a home colonization in the eighteenth century.

the unattractiveness of home, notably the difficulty or impossibility of getting a living. The cause of this is not immediately our concern but the fact that millions may emigrate from this cause like the ycomanry of England in the eighteenth century and the peasants of Ireland in the nineteenth. Oppressive taxation and misgovernment and religious persecution have also been potent agents in driving population out of one country into another.

(m) Where the best lands of a country are already occupied, and where at the same time family life is lasting and healthy, that is, where the permanence and indissolubility of the home is recognized and respected, and where marriages are fruitful: emigration may be expected, and is due neither to the misery felt at home, nor to the El Dorado hoped for abroad, but to the desire of preserving the family lands or business intact, and of not charging them with too many persons to support.* Such emigration may take the form of enlarging the limits of the country, and in this way the great empires of Russia and China have grown up; or it may be in the form of transmarine colonization as some of the emigration among the modern English, and most of that among the Scandinavians and Basques, and in the last century the emigration from Normandy to Canada.

§ 291. As might have been expected from the variety and complication of the causes affecting population, the results in different times and places have been very different. We learn of a variety of increases (for example, in the decade ending 1881, very rapid in most of the States of North

* Le Play, *La Réforme Sociale*, ch. 39, well distinguishes *l'emigration pauvre*, which is a sign of misery, from *l'emigration riche* of well provided members of 'stem families.' The latter kind of emigration, he marks, though it removes population and wealth, does not impoverish the home country because it implies a fecundity and an energy of labour there that no other régime would give (§ iv.-vi.)—The need of distinguishing different kinds of emigration is well explained by Mr. Cliffe Leslie in his Essay on *Political Economy and Emigration* reprinted in his *Land Systems and Industrial Economy*, 1870. In particular he notices (p. 93) how emigration is a name on the one hand for the healthy tendency of the age to develop the resources of the whole world, and on the other hand for "a flight of industrious enterprise and productive power from places whose natural resources are made in a great measure inaccessible to industry and development."

America, rapid in England and Prussia, slow in France and Hungary), and a variety of decreases; of changes from increase to decrease (Ireland in 1846, much of Spanish America at the revolt against Spain), and conversely (Holland at the close of the Napoleonic wars, Mexico I believe about 1870); of races so increasing as to fill vast regions of the earth (English, Russians, Chinese), and of others decaying (Turks, Persians, Eskimos); of lands not so long ago uninhabited wilds now covered with homesteads (the prairies and the pampas), and of lands once densely peopled now almost a solitude (Babylonia, Cyrene, Yucatan). And we see the greatest variety in the actual distribution of population, some countries having over 400 inhabitants to the English square mile (Belgium having 486, England and Wales 445, Bengal about 440, Saxony 438, the Indian North West Provinces about 416), others having not half as many (Austria 191, France about 188, the Punjab about 178, Ireland 161), others not a quarter as many (Spain about 95, the Indian Central Provinces 91, Russia in Europe about 40, Sweden 27), and most of the States of the two Americas and Australia having still less (the Canadian dominion for example having only 5, excluding the vast North-West territory attached to it, and less than 2 if we include it).* Moreover, though there is a rapid increase of population in many of the thinly peopled lands, more rapid than in most of the thickly peopled lands, there is no regularity in such differences, no approach to a general equalization of density; and in several densely peopled regions the latest returns have shewn the population growing denser (England, Holland, Belgium, Saxony, Bengal), in several sparsely peopled regions, sparser (Ireland, the India Central Provinces, and it is thought Asia Minor and Morocco). The population of the whole world, taking 1 January 1883 as our day of reckoning, may be put at something under 1,500 millions and something over 1,100 millions, the great variation in the estimate being due to the uncertainty of the numbers in China and inner Africa. It is

* The foregoing figures are all based on returns or estimates not earlier than the year 1879. In these as well as in other illustrations it is only too likely I may have made mistakes; only not such, I think, as in any way to vitiate the argument.

probable, not certain, that the world was never so well peopled as now. It is almost certain that in the century 1783–1883 there was an increase in the population of the world. But this is only one century out of many; and we look in vain to history and physical science to shew us any regularity of increase or of decrease. The evidence will not allow us even to say there is habitually a slight increase each year broken by occasional years of large decrease, as when there is warfare or pestilence, the general progression being thus a gradual ascent broken by occasional sudden descents. For there can be a gradual decline of population as among the ancient Greeks and modern Turks. And a veil hangs over the future. Who could have foreseen at the beginning of the third century the fearful calamities that were to reduce the population of the vast Empire of Rome by perhaps one half before the century closed? or at the beginning of the 14th century that the Black Death would come in the middle and sweep away a third or a half of Christendom? And so, if any one, after giving us a table of how long at its present rate of increase, the population of each country would take to double, goes on to reason as though such a progression was really likely, he is in error; for he reasons as though the causes of increase were fixed, when in truth they are variable.

§ 292. We have looked at the facts of population, but in order to form a right judgment about them we must first know what we ought to wish; and this is to be learnt from Ethics. We can learn moreover with ease and precision, because in this matter we are not confined to the twilight of reason, but have the daylight of revelation, and Christian doctrine for our guide. It is in the order of Providence that man should increase and multiply and subdue the earth, and also that he should eat his bread in the sweat of his brow.† Consequently a stationary population, or a starving population, or a population revelling in ease and delights, is against

* A graphic account of the wars, famine, and pestilence of that unhappy century is given by Gibbon, *Decline and Fall of the Roman Empire*, Ch. X.

† *Genesis*, I. 28: "Crescite et multiplicamini, et replete terram, et subijcite eam." III. 19: "In sudore vultus tui vesceris pane."

the order of Providence. Fill up each land, but then do not cease to multiply, but either disperse and occupy more of the earth's space, or else improve the arts of production so that from the same space more men are able to gain their daily bread with reasonable toil: in both ways acting doubly for God's glory, first that He may have more rational creatures to worship Him on earth and people heaven, and secondly that more of the surface of the earth and of the physical order that He has created may be by these rational creatures explored. This is what is to be desired, and not, even were it possible, that a comparatively small population should by the aid of physical science live with scarce any privation or toil. But it would not be possible because from the nature of the case, as we saw in the last chapter, to live in this way we must have many servants. And thus the bulk of the population would still have to eat their bread in the sweat of their brow. Further the Christian doctrine has declared war on every kind of immorality, and only admits two conditions of life, either absolute continency or else fruitful marriage, that is where the married pair neither artificially limit the fruitfulness of their union, nor refuse to rear the children that are born to them. At the same time, though the state of marriage is honoured, the state of virtuous celibacy, even when not consecrated by any vow, is preferred. But though it might seem that the glorification of virginity, characteristic of Christian doctrine, might lead, where Christianity was very powerful, to a stagnation or even decline of population, this is only seeming; and there is no contradiction between different decrees of Providence. For though it is conceivable, and perhaps once in Egypt in the fourth century happened in fact, that so many might be called to a life of virginity that the population declined, in the main the effect of the counsel of virginity, which is for the few, is far outweighed by that of the precept of chastity, which is for all, whether married or celibate: the *number* of marriages is increased by the fresh motive, namely, to avoid sin; while their *fruitfulness* is increased because for the same reason they are often contracted early in life, and also because immoral limitations to the number of children are utterly forbidden. And thus we can say as was said by St.

Chrysostom long ago : "The human race is lessened, not by virginity, but by sin."*

§ 293. The ideal of population as deducible from Christian doctrine can better be understood by answering two objections. First it may be urged that quality has claims as well as quantity, and that this packing each country as full as it can hold of people like herrings in a cask involves the crushing out of all cultivated life. For on our own shewing (*sup.* § 285) there can only be the maximum of population if no one has more than the minimum of food, clothing, and shelter needed for physical health. There could be no gentry, but all boors with little leisure and less learning. I answer, this objection misunderstands the Christian ideal. We are bid, not simply to multiply, but also to subdue the earth; and the cultivation of literature and science, of the fine arts and the industrial arts, is part of man's office. How inequality of ownership and enjoyment is thereby justified I have already fully set forth (*sup.* § 149, 150). And thus a country is fully peopled when any further increase of population would (assuming the arts of production unchanged) of necessity result in one or several of the following inconveniences: that the number of the rich and cultivated people would be unduly lessened so that there would not be enough of them to fulfil properly their office in society; or that their quality would be impaired for want of sufficient leisure and wealth; or that the lower orders of society, or some of them, would no longer have enough to live suitably to their station, in a manner most conducive to their attaining the end of their existence; but would have less. It is true there is a certain vagueness about what is the right proportionate number of the upper, the middle, and the lower classes, and what is the right quantity and quality of wealth for each to possess. But although numerical precision is not to be thought of, and general propositions are out of place, it is not impossible in the case of any particular country to judge whether any large body of the people have not wealth enough

* *De Virgin.* c. 18, cited by Hettinger, *Apologie des Christenthums*, Bd. II. Abth. III. p. 308: "In the last century one of the main charges against the Church was that her teaching hindered the growth of population. Now she is accused of fostering over-population."

to live a good life, and whether this deficiency is due to their being too numerous, and whether there are relatively too many rich people, or too many middle class people, and in particular—a matter I will revert to again shortly—whether the rich and middle classes might by a different manner of living equally fulfil their mission of culture, and at the same time render it possible for a much greater number of inhabitants to get a decent living in the country.

I think I have sufficiently answered the first objection to the Christian ideal of population, and I will add that on these matters there is harmony between piety and patriotism. For the true patriot desires that his country, neither oppressing others nor oppressed, be filled with an abundance of inhabitants,* and that by the possession and use of colonies it may have a field for national expansion, the spread of the national cultivation, literature, and life. And this is in accord with the recommendations given above (§ 292), and quite at variance with the narrow-minded parochialism that looks askance at each infant as being a potential pauper.

§ 294. But it may be said, and this is the second objection to which I have alluded, that we have only shirked and put off the difficulty of population and not met it; that we have not even the sorry excuse of being mistaken about the law of diminishing returns, but that, having expressly maintained the limited capacity of the earth to produce sustenance, and the limited field for improvements in production, we have absurdly gone on to reason as though there were no limits; that colonization is only a temporary resource; that the colonies sooner or later will in their turn be filled up; and that then, if population still continues to increase as we absurdly recommend, the whole world will be turned into a vast warren of Christian paupers, and at last every fresh increase will be cut off by starvation.

I answer that the objector need not fear we shall ever come to this. So vast a portion of the earth is still almost bare of

* In multitudo populi dignitas regis: et in paucitate plebis ignominia principis. Prov. XIV. 28. Cf. Perin, *De la Richesse*, l. IV. ch. II. 2nd edit. In the present condition of Europe it is a matter almost of self-defence for each State of any power not to allow its population to shrink up or increase much slower than that of its neighbours.

inhabitants, that, even if we absurdly suppose no interruptions to increase, many years must elapse before the peopling and subjugation of the earth is completed ; and an immense number of years, if we allow, as of course we must, for the interruptions to the growth of population by wars and natural disasters.* Nor is it sophistical thus to lay stress on the matter of time. For it is a fundamental dogma of our religion that the world will come sooner or later to an end. And thus the great point for us to shew is that there is no immediate danger of its being over-peopled ; on which matter we can triumphantly refer to history and statistics ; while as to the future we can leave the matter securely in the hands of Providence, being absolutely certain that no such miserable state will arise such as the objector supposes, no alternative of immorality or semi-starvation ; as though long before the trumpet of Doomsday might not have sounded, or populous regions have been swallowed up and millions of unpeopled acres arisen from the sea, or half the men and women been called to a life of religious celibacy ; in a word, as though God would not provide. Nor let any one murmur about this bringing in of theology, for the subject matter is theological ; and when we know the world will come to an end, it is foolish to reason on the assumption that it is everlasting.

A word may be added on a possible third objection to the

* Some figures have already been given (§ 291) shewing how sparsely some regions are peopled ; and it is not my business to give statistics of population that ought to be accessible and familiar. It is enough to notice four gigantic areas of colonial land, remembering as a standard of comparison, that the area of England and Wales is 151,030 square kilometers, and that when a country has fifty inhabitants to the square kilometer it is still only moderately peopled (England and Wales have over 160). One of these four areas is in Northern Asia, over twenty million square kilometers with less than two persons on each, belonging partly to China, partly to Russia. The second is Australia with nearly eight million square kilometers and not half a person to each. The third area comprises the United States and British North America, and contains about eighteen million square kilometers with an average of three persons in each. Lastly comes South America with over seventeen million square kilometers, and less than two persons to each. In this last case there is scarce anything to be deducted for desert or frozen regions ; and thus, whereas perhaps a half ought to be deducted from the other three areas as uninhabitable, South America probably affords easy room, considering its climate and fertility for 1,700,000,000 inhabitants.

Christian teaching on population. It may be said, that by preaching up early marriages and large families, we foster an excess of the incapable population in proportion to the able-bodied, causing these latter much unnecessary labour, and labour that too often, because infant mortality is always large, is thrown away, the children dying before they begin to repay what has been spent on them (*cf. sup.* § 275). I answer that undoubtedly there will be many children, but that this abundance is not excess; that to support the incapable is its own reward; that it is not labour thrown away to rear a citizen for heaven, though we receive no reward on earth; that this matter again is one of theology; that the more children, the greater the sum of innocent lives; that it is written, *Ex ore infantium et lactentium perfecisti laudem*.

§ 295. The word over-population is often used and abused. Its obvious meaning is that there are too many people in some country or region. But to say this, we must have principles on which to judge how many people at most ought to live there. What these principles are, we have just considered; and from them it follows that in speaking of over-population, we mean the case where, in a given state of the arts, the inhabitants are so numerous, that in order to get subsistence from the given country or region, their industry has to be so intense, that the richer classes are too few or too penurious, or the lower classes suffer privation, as explained in § 293. Nor is there any remedy except by lessening the number of inhabitants, or by making other people tributary to them, or by improving the arts. Such a case is not inaptly expressed by the metaphor, that population presses on the soil; and to such a case alone ought the word over-population to be applied. It is a phenomenon unlikely to extend, I do not know that it has ever extended, over a large country, and is most likely to be seen in isolated regions, such as mountain valleys, or small islands; and even there is very unlikely to be a permanent or even chronic malady, but only to last a few years till a remedy, and emigration is the most obvious remedy, is found.*

* Whether the Highlands of Scotland were ever really over-populated I doubt, in spite of Sir Walter Scott speaking through the mouth of Bailie Nicol Jarvie (*Rob Roy*, Vol. II. ch. IX.) But that they may have

Over-population in the sense just explained ought to be carefully distinguished from three other cases which have some resemblance to it, but which may at once be seen to differ from it by this, that to none of them can we apply the formula: population presses on the soil. The first is urban congestion or local overcrowding; the second is the temporary disproportion of population to subsistence through the means of subsistence for some cause falling short; the third is the permanent appropriation of the means of production and enjoyment in such a manner that an artificial boundary is put to the increase of population, or that even many of the actual population are no longer able to get a living within the country. The first of these three cases, the morbid inflation of cities, has already in a previous chapter (*sup.* § 128-134) been sufficiently examined. Here it is enough to say that there is a presumption against its being due to population pressing on the soil, because of this fact, that it is seen in thinly peopled countries like Russia and the Atlantic States of North America, not only in thickly peopled countries like England and Saxony; and again, not only where the population increases fast as in Prussia and California, but where it is almost stationary, as in France. And this presumption becomes a certainty when we remember the causes of urban concentration already set forth (§ 129-132), and quite distinct from pressure on the soil. Indeed where such pressure really existed, the great bulk of the people would of necessity be at work on the land, not in cities, and urban concentration could not, I imagine, be so conspicuous in a country where really there was over-population, as where there was not. It follows therefore that the great evil of swollen cities must not, unless we are aiming at deception, be called over-population, nor the cities themselves even be spoken of as over-populated. For the phrase suggests causes of the evil which are not the causes, and remedies which are no remedies.

§ 296. The second case, namely the temporary disproportion of population and subsistence, is also quite distinct from

been is not in itself unlikely, considering the nature of the country and the want of any friendly and Gaelic-speaking land to receive emigrants.

over-population. There is so far a resemblance that in both cases the people as a whole are unable to get sufficient means of subsistence ; but then in the one case the malady is acute and the evil an exception, in the other the malady is chronic and the evil is the rule. The causes in the one case are various, as failure of crops, destruction by warfare, enclosure by besiegers, carrying away or withholding food ; whereas in the other case the cause is simply that production is too intense, that more is habitually required than can be got from the country. In the one case the removal of a large number of the inhabitants is no remedy, in the other case a complete remedy. It is true that relief from famine is sometimes to be had or to be hoped for by flight from the stricken land, as when thousands flocked from Rajputana in the famine of 1868-1869 to the surrounding regions. And many of such fugitives like Jacob and his sons may lack the means or the will to return, and the place of temporary plenty or centre of the distribution of relief, may become their permanent home. All the same, permanent removal is in itself no remedy against the recurrence of famine, because famine is not due to population pressing on the soil. Plainly where the food is wilfully removed, withheld, or destroyed, the deficiency is not due to over population. And in the other case of failure of crops, there is no presumption that the crops of a densely peopled region are more exposed to failure than those of a sparsely peopled region ; indeed there is a presumption the other way from the variety of crops in spade husbandry. And in fact famines have occurred quite independently of the density of population, for example, within the last forty years, in densely peopled Oudh and Bengal, in moderately peopled Ireland, Madras, Bombay, and Northern China, in thinly peopled Rajputana, Persia, Asia Minor, and Northern Brazil. Indeed there cannot well be a more monstrous confusion of thought than to think a famine-stricken region is the same thing as an over-peopled region ; though it is not wonderful that famines, being mostly the result of folly or oppression, are surrounded with mystification. But the matter is really simple enough. A detailed examination of the causes of famine and the measures of relief belongs to the Fourth Book on Economical Maladies.

At present I need only refer to what has already been said in § 159 and especially in § 140 *ad E* ; to which I will add the following remarks. Famines in besieged cities and blockaded regions are a matter for Politics and the military art rather than for Economics. Other famines have as their antecedent almost always the failure or destruction of food crops by drought, rain, flood, frost, hail, insects, vermin, or the like. Naturally, to reduce such calamities to the minimum of frequency and force, is a measure against famine ; and some countries may by nature or art be secure against them. But in most countries there is more or less risk ; and since the death of thousands by starvation is the result of neglect, every good government is bound to see that the means exist to prevent such an evil. Now these means can be reduced to two heads, one physical, the other moral. There must be, on the one hand, a stock of food sufficient to feed the people till the next harvest, either stored in the afflicted country or district, or stored in a place so near or so accessible that the food can be imported in time. On the other hand those who have got the food must be moved in some way whether by their interest or their fears, their shame or their compassion, to hand over the supplies to those who need them. If there is deficiency either in the physical or in the moral precautions, the first failure of food-crops will bring famine. In most cases the failure cannot be prevented : what can be prevented in perhaps ninety-nine cases out of a hundred is the famine.

§ 297. The particular means of prevention vary with the circumstances of the case. In a country with a great number of the rich people living in it, easily accessible from many other countries that produce transportable food, possessing a large body of enterprising merchants and carriers, and with inhabitants accustomed to the machinery of trade and to buy even the necessities of life, it may be needless for the Government to take any steps, for it can trust to half the world being its storekeeper and to these stores being accessible if its own crops fail ; there are corn-dealers to be attracted and it has the wealth to attract them. Such is the condition of modern England, Scotland, Belgium, Holland, Massachusetts, and perhaps several other States. But where

any of the conditions fail which alone can justify our trusting to corn merchants and provision dealers, to trust to them is a miserable delusion.* The country may be remote or inaccessible like Iceland, Persia or Orissa. Most of the inhabitants may be accustomed, not to buy, but to grow their own food as most of the Irish in 1846, and even if retail dealing in provisions can be set up, the poor may have no power to resist fraud and extortion. Again, a resident wealthy class, able to support the poor through the season of trouble, may be absent, or if present may be unwilling to do it without compulsion, and not in a position to be compelled. In all such cases, and they are the rule rather than the exception, we must not abandon the poorer classes to the care of speculative merchants, but must bid public authorities, local or central, take the due precautions. These vary with

* This error is characteristic of the Industrial and Neo-Industrial School of Economists (*sup.* § 38, 39, 41). The result has been that millions have perished of hunger or its consequences. Whoever studies intelligently the history of the Great Irish Famine will have to avow that in that great calamity over a million of Irishmen were offered up as victims to 'Political Economy.' In its name folly was heaped on folly, and the principles of the 'Great Science,' as it was called, were only abandoned when hundreds of thousands had perished and hundreds of thousands more could no longer be preserved. It is indeed an irony of fate that Adam Smith in that mischievous digression on the corn trade, wherein he declares "the unlimited unrestrained freedom" of this trade to be "the only effectual preventative of the miseries of a famine" (*Wealth of Nations*, Book IV. ch. v. p. 234), and thus shews himself a votary of this absurd delusion, proceeds to play the enlightened man and compares (*ibid.* p. 238) the fear of engrossing and forestalling to the fear of witchcraft. But for every one man who has lost his life from the belief in witchcraft a hundred have lost their lives from the belief in 'Political Economy'; and the Centenary of the publication of the *Wealth of Nations* saw the beginnings of that dreadful famine which raged in several countries of India and slew more than five million victims: a slaughter that might all have been prevented but for Political Economy and the gospel of Adam Smith. In truth the doctrines of the Aztecs on human sacrifices were not more destructive of life than has been this baneful superstition. That we have not yet learnt wisdom can be gathered from the stuff that is to be found in the Report of the Indian Famine Commission (*Parliamentary Papers*, 1880, Vol. LII.), and from the republication boldly and without amendment by Sir Charles Trevelyan of his varnished and sophistical apology for the Government during the Irish famine, entitled *The Irish Crisis*, 1880 (1848).

climate, food-crop, and other circumstances. In most or all the countries that make up British India, famine could be averted by local storage of grain enough to last the locality for a couple of years, with proper regulations for its sale in a scarcity at prices fixed by authority, or for its distribution either gratuitously or in the shape of wages in kind. Under other circumstances, where the utter failure of all food crops is not to be feared, the prohibition of exporting food may be an excellent precaution whenever there has been a serious deficiency in any main food crop. Had such a prohibition been enforced in Ireland from the autumn of 1845 onwards, the physical precautions for keeping the people alive would have been taken, as the grain crops would have been a substitute for the potatoe. Nor need there have been any serious difficulty in distributing this supply of food, as the grain was by nature already widely scattered in the homesteads of the peasants. But it was taken from them to the manifold profit of absentee landlords, British mortgagees and money-lenders, British corn merchants and shipowners; while they who grew the grain perished by hundreds of thousands of famine.* For although Economists tell us if there is free trade the plenty of one place will relieve the scarcity of another, there is some hitch in the arrangement, and the corn-dealers, whether it is that they have too much of the human too little of the angelic in their natures, or for some other reason, seem to prefer taking corn to people who can pay, though they only want it for their beasts or their brandy, than taking it to people who cannot pay, though they want it for their lives. Where grain or other food-materials are much used for making beer, spirits, or other commodities that are not necessities of life, the suspension of such use has often been resorted to in order to lessen a scarcity of food and can be carried out

* See Rev. John O'Rourke, *History of the Great Irish Famine*, Dublin, 1874, p. 66, 86, 87, 161, 252. This excellent work ought to be studied by all Economists. Unfortunately the literary form and arrangement is not equal to the matter. There is a good sketch of the famine in the sixth chapter of Mr. A. M. Sullivan's *New Ireland*, 6th edit. 1878, and several admirable passages in Sir C. G. Duffy's *Four Years of Irish History*, Bk. I. ch. ii., Bk. II. ch. i. ii. iii. and v.

without injustice. That the Government should forbid distillation from grain was one of the measures called for in 1845 by the Irish when their potatoes had failed, but as was to be expected in that dark age, called for in vain. Among useful minor measures are prohibitions of wasteful practices, such as making very fine white bread, or selling any bread new.* Importation of food by Government may at times be necessary to save life ; but things can scarcely come to this pass, I take it, unless other better and previous precautions have been miserably neglected. Finally, there are various measures relating to the distribution of food. Of course, if there is not enough food, no amount of regulating the mode of its distribution will make it enough ; and to trust simply to laws against forestalling or withholding provisions, and to assessment of prices by authority, is folly. Only it is equal folly to denounce all such laws and assessments as though they might not be of great use where there was food enough in the country, or as though the corn in the stores of the merchant flowed by some mysterious and irresistible attraction into the suppliant hands of starving and penniless multitudes, who have nothing to offer in exchange for it.

§ 298. We have looked at two of the cases which bear a sort of resemblance to over-population : we have yet to look at the third. This is where the means of production and enjoyment in a country are appropriated and used in such a manner that much fewer can get a living there than could otherwise without the country being overpeopled. The two most conspicuous forms of such factitious limitations to the population of a country have already been explained, where, namely, large tracts of land are for the sake of profit cultivated with less intensity, or for the sake of pleasure not cultivated at all ; the result in both cases being that fewer inhabitants can find the means of living within the country

* This is noticed by Roscher, *Ackerbau*, § 157. He has some good remarks in his discussion on Korntheuerungen (*ibid.* § 152-158), and in a former chapter (*sup.* § 140, note pp. 266-7) I cited an excellent passage. But in the main he is ensnared in the errors of corn speculator worship, and is little better than Mill (*Polit. Econ.* Bk. IV. ch. ii. § 4 and 5), and other Neo-Industrialists.

(*sup.* § 268, 269). Even where there is no lessening of intensity of cultivation, and as much is produced as before, the method of production may be such as to lessen the number of inhabitants. For machines or brutes may take the place of men, instead of lightening their toil, or enabling more to gain a decent living in the land. And the same thing may happen in other branches of industry, in fishing and mining, manufacture, transport, and commerce, as well as in the cultivation of the land. But as long as in all these cases production is really as intense as before, and the total net revenue drawn from the property in question is as much as ever, there cannot, I think, be any very great depopulation, though there may be much misery and injustice. There may be troops of displaced husbandmen, miners, fishermen, artisans, carriers, and shopmen; but then, besides those who make and repair the machines, and who rear and tend the domestic animals that have taken the place of men, there must be a great many more servants wanted, according to the principles already laid down (*sup.* § 258–260), to enable those who have grown richer by the change to get any fresh enjoyment. There is therefore something of a compensation, and the change in great measure is this, that so many in every hundred who used to get their living in one way, still get it, but in another way.* Whether indeed the new way is as good as the old is another matter, but not to the present purpose; for we are considering, not the quality of inhabitants, but the quantity. And the grand method of permanently reducing that quantity by making it impossible for

* The optimistic view on compensation, that the workpeople displaced by machinery can always find other employment, is severely dealt with by Karl Marx, *Das Kapital*, pp. 459 *seq.* But he is unfair on J. S. Mill, who fully recognized the possibility of the working classes being injured by machinery (*Polit. Econ.* I. ch. VI. § 2, 3). Injury to the working classes as a whole is preventible by vigilant and right-minded legislators. What is more difficult to prevent is injury to particular sets of workmen, those, namely, whose former mode of work is rendered obsolete, and who are too old to change, or have been unfitted by that very mode of work for anything else. For such as these emigration is not the least use: they can no more earn anything in the new country than in the old; and can only support themselves if the change to the new system is introduced gradually, in proportion as the new generation takes the place of the old.

many of them any longer to get a living in the country, is by having the land cultivated with less intensity; and this has been done again and again on a large scale, and is being done still in the shape of what is technically known either as clearance or depopulation (*sup.* § 269).

§ 299. But factitious limitations are present, not only where the existing population is rendered 'superfluous' by lessening the intensity of industry, but also where it cannot increase because increase of intensity is prevented. Large tracts may be in the control of a few owners, and the laws may be such that these owners for their own profit, or ease, or pleasure may prevent intensification. They may keep the land as waste, or rough pasture, or as a monster farm (*sup.* § 107, 110), or at least prevent the substitution of spade husbandry for the plough. Mineral treasures and fisheries may in the same way be monopolized, and kept unused, or worked with little intensity.* All which abuses can be remedied very simply where there is good will by laws against waste. A land tax, for example, assessed, not on what the land does produce, but on what it might produce, will break up latifundia, and force the owners to give up all land which they cannot cultivate with some intensity. This is what happened in the later Roman Empire, and there are somewhat similar laws in the United States. Again, it may be lawful where mineral treasures, or fisheries, or lands are not being worked or only trifled with, for any competent person, such as a miner, or fisherman, or husbandman, to take possession of as much as he can work, and hold it, and his heirs after him for ever, as long as they keep these means of production in working order, and to pay only some small toll, or nothing, to the former owner. Such I understand is the law in Cornwall in regard to mines, and the law of China in regard to waste lands.

Artificial limitations to population can come from the way of enjoying as well as of preparing wealth; for there can be

* Ireland is a classical land for these as for so many other abuses. On the iniquitous usurpation of the fisheries forty years ago see *The Dublin Review*, March, 1848, Vol. 24, pp. 98 *seq.* The effect on population can be judged of from the example of the Shannon, which, properly fished, would give employment to ten thousand people, but was so appropriated as only to give employment to three or four hundred.

a needless waste in enjoyment. One of the most notable cases is where the food taken, whether by the rich or the poor, is more costly than in reason it ought to be. Too much flesh meat or of too costly a kind may be eaten, requiring a vast area for raising it; and people may cling to one or two staple foods, and refuse to change or vary their diet by using others as wholesome and less costly. Various instances of such wastefulness have been given in a previous chapter (*sup.* § 157, 158), and I will only add that if bread in England were never eaten when it is new, the gain might equal an annual addition of three or four per cent. to the stock of bread; that the use of any fish out of season might be prohibited; and that the eating of very young animals might be checked and discouraged.* Indeed the prevention of wasteful enjoyment opens a wide field for sumptuary laws. Again, the use as in China and Japan of men instead of horses to draw the carriages of the rich, or bear their litters, whether there be other grounds for or against it, enables more people *ceteris paribus* to live in the country; and in general, recreations that require many attendants and small consumption of property, as enjoying the performance of bards, actors, and musicians, or certain forms of banqueting and hunting where there is splendour from the swarm of retainers and followers, allow more to live than where, as in banquets like those of London, or horseracing, the number of servants is comparatively small, while the amount of property consumed is very large. And where it is usual, as in China, for several branches of a family to club together and live in

* In the spawning season the flesh has been found by analysis to contain far less nutritive matter than at other times; and besides, by waiting a few months we allow the fish to yield twice the amount of food (Edward Smith, *Foods*, p. 108). Calves are killed too young in England, besides the wasteful mode of killing, whereby the blood and its valuable salts are extracted. On the Continent they are six to nine months old when killed; and in American Boston the law since 1855 has forbid their being killed under one month old, as often is done in England (*ibid.* p. 50). Lamb has more water and less nitrogenous matter than mutton (*ibid.* p. 57). Rice ought not to be eaten till at least six months after it has been gathered (some say three years), as new rice is much less digestible than old, and likely to produce disease (*ibid.* p. 164). Query whether some check might not be put to the slaughter of pigs during the summer months?

common, the saving of expense enables the same family property to support a greater number.

I will not dwell more on such cases, for I think that compared with the lessening or prevention of intensity of husbandry they are unimportant. Enough, that all waste of wealth and of labour, not only in the preparation of wealth, of which various examples were given in the sections on the opposition of private and national interest (§ 267-272), but also in the enjoyment of wealth, form, an artificial limitation to the number of inhabitants.

Finally, let no one in view of these facts raise a fresh objection against the ideal of population I have held up, and cite the well-known passage from Mill against the extirpation of solitude, and say that this Christian ideal of population implies a "world with nothing left to the spontaneous activity of nature; with every rood of land brought into cultivation, which is capable of growing food for human beings; every flowery waste or natural pasture ploughed up, all quadrupeds or birds which are not domesticated for man's use exterminated as his rivals for food, every hedgerow or superfluous tree rooted out, and scarcely a place left where a wild shrub or flower could grow without being eradicated as a weed in the name of improved agriculture" (*Polit. Econ.* Bk. IV. ch. VI. § 2). It would indeed be a sad world; but could not result from the Christian ideal of population. For first, that ideal calls for a reasonable amount of land being set aside for recreations: pleasure-gardens and ground for sports and games; and then, besides the woods needed for shelter and rainfall, the need of timber or firewood would cause a number of silent groves to be scattered amid the multitudinous hamlets and homesteads; finally, the earth itself provides abundant solitudes, if perverse laws do not hinder. For not to speak of steep or frozen mountains and swamps and deserts, cultivation is often best concentrated on fertile spots. Thus in China you pass from densely peopled rice plains, each cultivated acre supporting some twenty people, to the almost uninhabited mountains around (W. Gill, *River of Golden Sand*, II. pp. 276-7); unlike Ireland, where the natives have been driven to the barren hills, while the rich plains are kept a solitude.

§ 300. Having now the true doctrine of population to guide us, we can examine the false doctrines, some of which are perhaps of all the errors of Economists the most poisonous. It is not needful indeed to look at all errors, nor sound the depths into which the divine Plato descended and out of which the great master Aristotle could not rise ;* for it is work enough to help our fellow countrymen out of the mire. And first let us decline to be helped or rather hindered by a set of so-called anti-Malthusian arguments which either cannot be proved and are thus inadmissible, or can be refuted and thus give a seeming victory to our enemies. There is no valid evidence that riches and plenty of food lessen fecundity (Doubleday and Sadler), or that by some antagonism of the nerves, the more men are intelligent the less they are prolific (Herbert Spencer, Carey, and Proudhon). Nor would such doctrines, if true, be much use against that dreadful nightmare of Economists, proletarian multiplication. For there is a circle ; and this wretched prolific proletariat cannot get rich and intellectual till it stops multiplying, and cannot stop multiplying till it gets rich and intellectual. It is not true moreover to say that it is a law for population to increase in an inverse ratio to its density (A. Guillard and Sadler). It sometimes does and sometimes does not ; that is all. And it is not lawful to appeal to the unknown, and suppose occult influences at work 'checking' population (Greg, *Enigmas of Life*, Essay, '*Malthus notwithstanding*') when the known influences, which I have previously explained (*sup.* § 286-290) are ample to account for all the phenomena that have been observed. It is no use to point to the dying out of noble families ; for the causes are only obscure to those who shut their eyes. Thus English peerages often die out, though peers' families are not unusually small, because the honour is often confined to male issue, and because the younger sons often remain unmarried, thus causing a dearth of collateral heirs. And other cases admit of similar or other explanations. Again it is no use to point to the dying out of various races as indicating a mystery. We English people do not say the gentle natives of Hispaniola died away through some mysterious check to

* See Périn, *De la Richesse*, livre IV. ch. III. *ad init.*

multiplication. We say bluntly they died away through the cruelty of the Spaniards. So, although it would be more pleasant to say that various native races have in this nineteenth century being dying away through occult influences, it would be more true to say that they have been dying away, some through their own savage degradation, homicides, and immorality, most through the brandy, and bullets, and strychnine, and foul vices, and diseases, sent among them by the European races. Finally we must not allow any arguments that mean a denial of the law of diminishing returns (*sup.* § 70, 71, 285) and of the limitations to the advantages of co-operation (*sup.* § 98-101). So Carey and Bastiat held that the denser the population the easier was production because of the greater possible co-operation ;* and Mr. George follows in their track ;† all arguing as though, because it is true, when an exhausted labourer comes to his meal, that each mouthful makes him more and more capable for renewing his labour, therefore he can go on *ad in-*

* See Périn, *l.c.* livre IV. ch. I. pp. 471-474. In a colonial country it is easy to be misled from the evident advantage to the security, comfort, and wealth of the scattered settlers that is gained with each increase of population. The limits to this advantage being out of sight may soon be out of mind.

† *Progress and Poverty*, edit. of 1881, pp. 117-119, 126-134, 215. This is all the more the pity because a great part of what he says on population is admirable, and this good part may be rejected by sophistical critics as though it depended on the bad part. Mr. George gets wrong, first, from being caught in the snare mentioned in the previous note ; secondly, from seeing the concentration of rich people and their means of enjoyment in great cities and densely peopled regions, though of course the reason why there can be so many people there, is that there are so few people somewhere else ; thirdly, from looking too much to prices in money and forgetting the rude plenty of thinly peopled fertile lands, the fuel, and materials for building and for implements, the pasture grounds, and game, and wild fruits, and hunting and pleasure grounds, all provided almost gratis, but very difficult to be reckoned in money ; lastly, from being confused about matter and force, as though nothing was lessened by the increase of mankind, when of course the extra matter in the form of man, implies, unless we turn cannibals, less matter in the form of man's food ; and as though, if matter and force are indestructible, it follows that any number of men can find sustenance on the earth, when of course what concerns the question is not matter in any form, but only in forms useful to man ; and of these forms many are destructible, and all in their power to give sustenance are limited.

finitem, taking endless mouthfuls and gaining endless capacity.

§ 301. None of these shiftiy arguments are wanted to overthrow the modern delusions concerning population. For, having the true doctrine of population, a moderate acquaintance with facts and a modest stock of logic is sufficient to tear them up by their root. And their root is the doctrine, that the misery and poverty seen in so many parts of the world are due, in the main, to the population being too numerous: that the lower classes would be better off were they fewer: that their sufferings are, on the whole, their own doing, or rather that of their parents, being the result of their recklessly multiplying their kind: that unless this can be checked all efforts of philanthropy to better their lot will be in vain.

This arch-heresy, which may with convenience be called Malthusianism, has about it all the elements of success. It is an opiate to the conscience, and can quiet the reason with half a dozen different sophistries. Greed and selfishness and every oppression in the economical order find in this doctrine an apology, every social reform a discouragement.* Those only triumph who, shutting their eyes to morality, propose a remedy in homicide and abominations. For to suppose the bulk of mankind will live in chaste celibacy is ridiculous; and thus all who recognize the moral law and yet are ensnared by this doctrine can only fold their hands and admit that misery and starvation are the inevitable lot of vast multitudes of their fellow men. Such a conclusion I might indeed, were I pressed hard for arguments, use as a *reductio ad absurdum*; and say that a doctrine, touching directly our practical life, must be false, if it gave us nothing but the alternative of want or wickedness. But there is no need of such an argument. For we can shew, without looking at the conclusions of this doctrine, that the premisses are false, and we can explain moreover why so many people think these premisses are true.

* Henry George, *l. c.* pp. 87-89. I can refer once for all to his two excellent chapters, the first and second of his Book II., and shall borrow much from them. It is in the 3rd and 4th chapters that he gets on to the wrong track described in the previous note.

First then, it is false that the misery of the world in the main is due to overpopulation. That it might be is not to the point ; for we are dealing with the actual world. That in some insignificant and exceptional cases it has been or may have been (*sup.* § 295), is also not to the point ; for we are dealing with what is usual and general. And as regards this I say, that of all cases of wide-spread distress where the circumstances are known to us, the great bulk can be shewn to be the result of causes other than overpopulation and to have occurred in countries not overpopulated. A lengthy survey of many countries is unnecessary ; for I am not bound to prove a negative ; and the Malthusians cannot shew, not merely not many cases of misery plainly due to overpopulation, as they ought to be able to do, but not even a few.* And whoever considers the definition given above (§ 295) of overpopulation, and it is the only admissible one, will see that there are in all the world but few countries which it is not obviously preposterous to speak of as overpopulated. And of these few I will select three or four where there is much misery and where this misery is habitually attributed, or has some appearance of being due, to overpopulation.

§ 302. Let us begin with Ireland, the stock example of overpopulation, but so weak a one, that it is rather a desperate apology than a plausible illustration. Already that unhappy island has been cited as a victim of depopulation and waste (*sup.* § 269, 299), and it is sufficient now to take note of the

* Let us hear Mr. George, *l. c.* pp. 94, 95 : "Malthus' review of what he calls the positive checks to population is simply the shewing that the results which he attributes to overpopulation actually arise from other causes. Of all the cases cited, and pretty much the whole globe is passed over in the survey, in which vice and misery check increase by limiting marriages or shortening the term of human life, there is not a single case in which the vice and misery can be traced to an actual increase in the number of mouths over the power of the accompanying hands to feed them ; but in every case the vice and misery are shewn to spring either from unsocial ignorance and rapacity, or from bad government, unjust laws or destructive warfare. Nor what Malthus failed to show has any one since him shewn. The globe may be surveyed and history may be reviewed in vain for any instance of a considerable country in which poverty and want can be fairly attributed to the pressure of an increasing population."

three following points. First then, the phenomenon of misery, that is, extreme and chronic poverty of the majority of the population, appears from nearly two centuries ago to this day to be constant, while the population has been variable: some two millions when Swift described the misery in the earlier part of the eighteenth century; over eight millions when the condition of the people was examined by the Devon Commission; about five millions and a half when Mr. Cliffe Leslie wrote about them in 1867 and 1868, and several hundred thousands less in 1879 when the acute sufferings came that preceded recent agitation and legislation. Had the chronic misery and recurrent starvation been due to overpopulation, they could not amid such great variation of population appear thus persistently.* Secondly, there are known and adequate causes of the misery wholly distinct from overpopulation. The matter is painful and delicate, and I will refrain from details which any one who is in earnest can obtain with ease and in abundance. Enough, that power without responsibility is sure to be abused; that few good men are proof against lifelong temptation; that the prevalent tenure at will was, to speak mildly and in the words of the Devon Commission, 'a pressing grievance to all classes of tenants, paralyzing all exertions and placing a fatal impediment in the way of improvement'; that absentees and middlemen are scarcely compatible with any condition of the peasantry that is not miserable; still more when the peasantry are not protected against local usurers, and when the real ownership of perhaps more than half the land is in the hand of foreign money-lenders and mortgagees, who by our laws and customs are held discharged even from the scanty burdens and shadow of responsibility that rest upon the non-resident landlord.†

* On the state of Ireland during the early and middle part of the eighteenth century it is enough for the present purpose to refer to Mr. Lecky's *Hist. of England*, Vol. II. ch. VII. How the modern decrease of population has not benefited those that remain, has been set forth with admirable clearness by Mr. Cliffe Leslie in several essays collected and republished in his *Land Systems and Industrial Economy*, 1870: the miserable decay of towns and villages, the starvation wages, the genesis of a class of landless day labourers, impoverishment instead of relief by emigration. See the citations from Cliffe Leslie given in Appendix E.

† The statistics of evictions and depopulation, the laws concerning

Thirdly, chiefly, and decisively, the land is there, a fertile island, nearly one-quarter of it quite waste and barely a quarter of it under crops ; nor since Sir Robert Kane nearly forty years ago published his book on *The Industrial Resources of Ireland*, 1844 (2nd edit. 1845), is there any excuse for ignorance, any reasonable doubt but that the land, if only its people were allowed to use it and to reap the fruits of that use, could support in comfort double the population it ever had within historical times and more than treble what it has now. When Ireland was most peopled it poured out every year a stream of exports, notably a stream of food in the shape of grain, meat and dairy produce ; and those who with any serious knowledge of the facts still think or call the country overpopulated, are scarcely within the pale of economical reasoning.*

§ 303. India next to Ireland is oftenest in our mouths as a demonstration of Malthusianism. The misery of vast multitudes there we cannot with any decency deny. But we say it is not our fault but that of the Indians themselves. Our beneficent rule and the Roman peace that accompanies it have removed the former repressive checks to population ; and the silly people, instead of profiting by the cessation of murders and massacres, have gone on recklessly multiplying,

property, notably in regard to ejectment and debt, the returns of lands that have changed owners under the operation of the Encumbered Estates Act, all indicate to us causes of misery quite different from the pressure of population on the soil.

* Any one who wishes for information can find it in Kane's work, or in that by Mr. Cliffe Leslie already mentioned, and in many other publications, for example in an excellent series of letters on *Irish Farms and Farming* from a special correspondent of *The Times*, beginning 16 Jan. 1880, and shewing the immense field for draining, planting, reclaiming bogs, using the wasted water power ; how a multitude of the small farmers could double the produce of their land ; how millions of acres of miserable herbage, much of it weeds, are fitted by nature for tillage, and for the growth of forage crops, roots, and oats ; how there are vast tracts of land with only a thin covering of soil upon rock, or interspersed with boulders, or too soft for the tread of horses, in each case unfit for large farms but exactly fit for the spade-cultivation of small farmers ; how far from there being overpopulation or need for emigration there is abundant room for a great increase. Were there a land tax and laws on waste like those mentioned § 299 the emigration from Ireland and even the summer migration to England would speedily come to an end.

till pressure on the soil has reached such a point as to make misery inevitable, and to tax the utmost resources of our wisdom and benevolence to keep them alive.

But only fiction not fact will allow this apology for our government and this illustration of Malthusianism. For first to lump all India together in matters of population and prosperity is as profitless as to lump together England and Ireland. We must at least, putting aside the Native States and British Burma, distinguish six separate Indian countries under our immediate and permanent rule: Bengal, the North-West Provinces (including Oudh), Madras, Bombay (including Sindh), the Punjab, and the Central Provinces. For they are not alike either in their population and misery. We cannot as in Ireland compare different periods, for all accurate knowledge of the population of these countries is less than twenty years old,* but we can compare them as they are with one another. Now roughly speaking, five are in misery, and one, the Punjab, is in comfort. But if over-

* The following are the figures for the six countries :—

Country.	Area in English square miles.	Population in round figures		Approximate Population to the English square mile, 1881.
		By censuses 1865-1876.	By census of 1881.	
Bengal . . .	155,997	60,502,000	68,829,000	441
N.W. Provinces and Oudh }	105,961	42,000,000	44,106,000	416
Madras . . .	140,333	31,672,000	30,839,000	218
Bombay . . .	126,425	16,349,000	16,383,000	132
Punjab . . .	107,010	17,611,000	18,794,000	178
Central Provinces	84,208	8,201,000	8,173,000	91

In Bengal the previous census was in 1872, and the increase in nine years appears very great. But I think it an increase in appearance and in figures rather than in fact. For to get an accurate return in 1872 was very difficult, because the census was thought to be the forerunner of a tax, and the inhabitants wished to appear as few as possible. Cf. Kolb's *Statistik*, English transl. p. 157. Whereas in the last census the lesser fear of the natives and the greater skill of the officers made the returns more trustworthy. How much ought to be added to the returns of the previous census both of Bengal and of other Indian provinces, cannot I expect be determined with any accuracy. It follows that while we can get some approximate knowledge of the *density* of population in different Indian countries, we cannot as yet get a knowledge of the *movement* of the population sufficiently accurate to serve as a basis for reasoning.

population is the cause of the misery, how comes it that Madras is no better off than Bengal though only half as thickly peopled? And since the Central Provinces and Bombay are more thinly peopled than the Punjab, either they ought not to be miserable, or it ought not to be happy. Then secondly, as with Ireland, there are known causes of the misery wherever it occurs, quite sufficient to account for it and quite different from overpopulation. And here also I will not go into details but only indicate ten plagues of India which have afflicted it for many years, sometimes one of its provinces, sometimes several, sometimes all; and which are only in part and quite recently in course of mitigation.

§ 304. One is usury, frightful, widespread, keeping millions bound in life-long slavery, with neither the means nor the motive to cultivate the land aright; and all the doing of our purblind legislation. Another plague, chiefly in Bengal, is a land system on the Irish model, and also our creation, with much non-residence, and many middlemen, and iron-handed rackrenting, and brazen-faced disregard of duties. A third is the oppression of natives in divers ways best left unsaid by European speculators, in particular indigo planters. The three foregoing plagues could not rage with such virulence but for a fourth, our Civil Courts, which have, as far as the poor and honest are concerned, chased Justice clean away, which have spread enmities and contentions, frauds and perjury broadcast, which have wasted innumerable hours of toil, broken innumerable bonds of co-operation, been perhaps the most potent agent for the ruin of a people body and soul that the perverse ingenuity of man has ever constructed.* A fifth plague is that of mischievous public works, some giving a permanent benefit, but burdening the country with so heavy a permanent charge as to outweigh the benefit; others simply noxious, namely, much of the high level irrigation in Northern India, which, after giving excellent crops for a few years, gradually converts the land into a desert of

* On this and many other matters much information can be found in A. O. Hume's *Agricultural Reform in India*, London, 1879, a pamphlet which of all the literature on India that I know, contains the maximum of wisdom in the minimum of space and with the minimum admixture of error.

salt. A sixth plague is the want of trees, an evil we have partly permitted, partly promoted, as when whole forests were swept away by the railways. So the streams and hill-sides, and perhaps the rainfall have suffered, and above all the wretched people for lack of fuel must needs burn the dung that is, every load of it, needed for the fields. Another plague, the exposure to famine through the destruction of local storage I have already spoken of (*sup.* § 140, 297). An eighth is the salt tax, that for many years over much of India has raised the price of salt ten times or more, the price, to wit, of a necessary of life and health for both men and cattle. This scandalous impost, pre-eminently a tax on the poor, has caused the death of hundreds of thousands of cattle whose draught power and dung are the foundations of Indian agriculture, and thus has been a prime agent in the exhaustion of the soil and the ruin of innumerable peasants. Ruin also has come both to peasants and to richer landowners from our perverse method of taxing land, a ninth plague; for where we ought to have been content with payments in kind, varying in amount with the season, we have insisted on punctual payment in cash. A tenth plague is not the quality, but the quantity of taxation, which in most of the Indian countries is too much, partly because of the undue exemption of Bengal by the Permanent Settlement, partly because of the excessive expenditure of the Government, three great and needless causes of this excess being, first the elaborate, centralized, and costly civil administration; secondly, the employment at immense cost of a whole swarm of Europeans in subordinate posts; thirdly, the addition of three or four millions a year to the taxes by the amalgamation of the English and Indian armies, and the system of short service. Now these ten plagues, and the black list might be increased, are ample for our argument, and there is only one thing I wish to add, namely, that it is neither my business nor my inclination to indict the British Government: some of the ten plagues have been mitigated, and there is an inclination to mitigate several others: those whom I am indicting are the Malthusians; and against them I say that for the misery of India there are known and adequate causes other than overpopulation.

Thirdly, chiefly, and decisively, the plains and valleys of India are there before us fully able, without any increase of the present technical knowledge and skill of the inhabitants, to afford them all and many more an abundant supply of food, clothing, and shelter. This much can be learnt even from the Report of the Famine Commission, where they treat of cultivated area and waste lands (pp. 71-77), and where they tell us of the annual exportation of more than fifty million pounds' worth of raw produce (p. 96).^{*} It is not because the population is stupid or redundant, but because by the Regulations and Acts of their conquerors they are bound hand and foot, that there is not an ample grove of trees for each village as a supply of fodder and fuel, that salt is not cheap, that there are not cattle and manure enough for the land, that myriads of acres are appropriated to crops, mostly exhaustive, that are to be carried away to the foreigner. The soil is being robbed; the poor Indian husbandman knows it too well; and he knows also that the cause of the robbery is not the pressure of population upon

* The figures are almost incredible, and the articles are what we should expect to find as the exports of some colonial land mainly unsettled and unpeopled like Texas, Brazil, or Borneo. Here is the table omitting the two items of manufactured goods.

Average value during the last five years (1875-79) of the principal articles exported from India:—

Opium	£12,175,000
Raw cotton	11,515,000
Grain and pulse	7,963,000
Oil seeds	5,210,000
Raw jute	3,201,000
Hides	3,095,000
Indigo	2,973,000
Tea	2,579,000
Coffee	1,432,000
Wool	1,036,000
Total raw produce	£51,179,000

The great bulk of this vast exportation has arisen within the last two or three decades, while the native manufactures have been blighted, and multitudes have been turned from their graceful industries, the former delight of Asia and Europe, into exhausted and exhaustive extractors of raw produce, to be thrown (as the traders say) upon the markets of Europe.

the soil, but the pressure upon him and his fellows of usurers, and middlemen, and rack-renting landlords, and speculative planters, with little fear of God or man, and legal harpies, pleaders, and parasites, and the iron hand of the tax gatherer, the agent partly of a blind and blundering Government, partly of sharp sighted foreign creditors. And whereas to bear their burdens it was more than ever necessary for the natives of India to act in concert, we have weakened or broken up their union and their discipline by weakening or breaking up in most of India their old organisation in village communities; and the separated atoms having lost their cohesion are swept away by each gust of misfortune.

§ 305. But England, it may be said, choked with population and abounding in misery, is a patent example of over-population. I admit the misery and the density of population; but I deny that the one is caused by the other. England is undoubtedly a patent example of urban congestion (*sup.* § 295), but not of over-population; for there is plenty of wealth for all the inhabitants to live in comfort, and there is no pressure on the soil, and there are adequate causes of misery other than over-population, and misery would not be removed by limiting or lessening population. A word on each of these four propositions. First, the revenue received by inhabitants of England is enough, were it differently distributed, to maintain an upper class rich and numerous enough to fulfil the end of such a class, and an ample and amply endowed middle class, besides providing a decent existence for all the rest as a commonalty. I will not enter on the delusive field of statistics in money.* Rather let us

* The revenue of the upper and middle classes is in a way represented by what is known as the 'Annual value of property and profits assessed to the Income Tax.' But the mere money reckoning is delusive, being on the one hand too little because the returns of income in many cases (of which there have been occasional unpleasant disclosures) are much below the truth; on the other hand too large, because the same revenue is counted in many cases twice over, as that of the fundholders, government servants, lessors of dwelling houses, lawyers, and doctors. And then, even if the estimate in money was correct (in the four years 1865, 1870, 1875, 1880 it was respectively 335, 379, 481 and 485 million pounds), we should know little till we knew the quantity and quality that could be got for money of all the chief articles in use. And thus, although it would

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say that all who year by year fall into distress could be amply supported by what now is annually spent on pleasure carriages and pleasure horses, or on excessive drinking, or again by what is annually wasted of food, fuel, clothing, and furniture, without any pleasure to any one, by our perverse habits and disorganised domestic service. Secondly, there is no pressure on the soil. I do not say some farms have not been cultivated too highly; but this has been the result, not of necessity, but of delusion. And in the main we see the rural population stationary or declining, and for many years past there has been a steady increase of the proportion of land devoted to permanent pasture, while the absolute area under crops has not increased, and the area directly devoted to raising food for men has shewn a marked decrease.*

be convenient enough for my purpose, I cannot in conscience take Professor Levi's figures as laid before the British Association in the year 1882. He gives the 26 million working classes of the United Kingdom a revenue of 436 million pounds, the 11 million upper and middle classes 564 millions; making the total revenue 1,000 millions. This would give in England alone, making allowance for the greater poverty of Ireland, about thirty pounds annual income a head, or from £120 to £150 a family, a figure that might make us wonder there could be a poor person left in the land. A sensible leading article on Professor Levi's figures and terms is to be found in *The Times*, 30 August, 1882. I refrain also from any use, though it would be convenient, of calculations like those of Messrs. Shaw Lefevre and Giffen that in the last decade wealth had increased nearly 40 p.c., population only 10 p.c. (*Nineteenth Cent.*, May, 1879, pp. 841, 842.)

* The Census returns for 1881 shew an absolute decrease in the population of eight English and six Welsh counties, and only a very small rise in several others. The gigantic increase of the total that was 25,968,286 against 22,760,359 in 1871 is patently an urban and suburban, not a rural increase.—As regards the statistics of cultivation, any one can see them for the last fifteen years by the tenpenny purchase of *The Statistical Abstract for the United Kingdom*, published annually.—Long ago the translator of Sismondi marked the absurdity of speaking of redundant population in England, needing emigration as a remedy, when there were facts like those given in an official Report of 1827. For example:

In the parish of	containing	with popu- lation of	the circumstances of poverty were that
Bilsington, Kent	2,700 acres :	335 :	129 received parochial relief.
Pulborough, Sussex :	6,000 „ :	2,000 :	poor rates were 23s. a head.
Mildenhall, Suffolk :	16,000 „ :	707 :	besides 124 paupers, 315 were unable to pay rates.

Thirdly, there are known and adequate causes of misery in England other than over-population. Indeed, there is so much badness producing bad laws, and bad laws producing badness, and both producing misery, that we are embarrassed in our choice. Let what follows suffice as an example.

§ 306. There is no restraint put by the law, no adequate restraint by the custom or religion of the country, to any one collecting together from any distance any number of any kind of servant, maids and footmen, grooms and coachmen, clerks and shopmen, common labourers, navvies, needlewomen, skilled artizans: and then, at a month's, or week's, or even day's notice, turning them adrift to suit his own pleasure, or profit, or necessities, without being responsible for what becomes of them. And this is not merely possible, but is done. Even the Government, and noblemen, and millionaires do not refrain from the practice; landowners and tenant-farmers are not exempt from it; and among the manufacturing and commercial classes, from the largest to the smallest master, it is habitual, and hands are taken on or turned off according to the fluctuations of trade. The number for example of male persons employed in coal mines was respectively 370,000, 477,000, 536,000, and 494,000 in the four years 1871, 1873, 1875 and 1877. We have not in the present Book to examine the reasons for these fluctuations, how it is that the price in money of so many commodities so frequently changes, and that industrial mistakes are so frequent as to result in over ten thousand failures every year in England.* It is enough that over-population is plainly not the reason. If there was over-population each trade could not give adequate employment to those engaged in it. But now there is for one season of the year, or for one period of some months or a couple of years, too much

(*Polit. Economy* by S. de Sismondi, transl. from the French, London, 1847, pp. 86, 87). And mark the following brief but significant paragraph from *The Times*, 2 Sept. 1882. "The Bishop of St. David's on Thursday reopened the parish church of Llandawke, a Norman building of great antiquity, which for years has been in a most ruinous and dangerous condition. The parish is only 620 acres in extent, and all the land except the glebe is owned by a single Nonconformist, while the population all told is only 21." So about 22 to the square mile!

* See the figures given by Mr. Richard Seyd periodically in *The Times*

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to be done in a given trade, and then in another season and another period too little ; and amid the more helpless and disorganized classes miserable overwork alternates with miserable idleness. Indeed in many trades it is probable that even in what are called the slackest times there is enough to keep all in employment if the work was properly distributed, and no one was overworked, and no one who was by age, sex, or condition unfit for it, was at work.* Nor

for example 8 Jan. 1883, where the failures in the United Kingdom are put as follows :—

In 1877	.	.	.	.	.	.	.	11,022
—78	.	.	.	.	.	.	.	15,059
—79	.	.	.	.	.	.	.	16,637
—80	.	.	.	.	.	.	.	13,147
—81	.	.	.	.	.	.	.	12,005
—82	.	.	.	.	.	.	.	11,016

The numbers in Scotland are much less in proportion to its population than in England, and the numbers in Ireland are very much less in proportion. Thus in 1878 England (in which Wales is always to be held included) had 13,869 failures, Scotland 852, Ireland only 338.—The number of failures recorded from time to time in Canada and the United States might teach us not to connect them with over-population. For present convenience a few remarks on the nature of a commercial crisis are given in Appendix C.

* Speaking of England in 1867, Karl Marx says : “The ‘labour-saving’ appliances there are colossal ; and yet, were labour forthwith reduced all through the country to a reasonable measure, and once more properly graduated according to age and sex among each portion of the working class, the actual population of workpeople would be too few to keep up the national production at its present level, and the great majority of the present ‘unproductive’ labourers would have to be turned into ‘productive’” (*Das Kapital*, 2nd ed. p. 662). Just before he cites the Reports of Inspectors of Factories on how in the midst of the Lancashire Cotton Famine while hundreds of workmen were in forced idleness others were being shamefully overworked.—One of the greatest abuses has been the employment of an undue proportion of apprentices and of raw hands, drawing fresh workmen into a trade when many in it were already out of work. Naturally where wages are fixed by competition it is the ‘interest’ of the masters that many of the workmen be kept unemployed so that the rest may be more docile. The employers in the building trade in London, according to Mr. Beesly in *The Westminster Review*, October, 1861, p. 520, aim at keeping a certain number of men unemployed so that the rest may be more at their mercy ; and they will even sacrifice their immediate interest to this end ; for when there is a

would the misery caused by this manner of dealing with servants be removed by limiting or lessening population. And this brings us to the fourth of our propositions. Keep our present manners and customs, and though you lessen our population we shall still have the oscillations of trade, and the multitudinous failures, and the overwork during the London season, and the dismissals at its close, besides other causes of misery, as urban concentration and demoralization through drink, that I might have chosen to exemplify the third of our four propositions. There are plenty of means to deal with these causes of misery, and some of the means I have already indicated; but assuredly to lessen the population is not one of them. It may be noticed, by the way, that, as long as we keep our present economical constitution, to tell our workpeople to raise their condition by ceasing to multiply, is to add insult to injury. For by that very constitution they are unable to control their numbers, and all the Malthusian 'prudence' of one set or one district may be frustrated by the 'imprudence' of another; and if *per impossibile* all could combine in a pious league to limit their offspring, it would avail nothing, because by that same constitution 'cheap labour' as it is called, Irish, Polish, German, Chinese, could be imported at pleasure.*

Having so far condescended to prove a negative, that the sufferings of Ireland, namely, and India and England are not

press of work they will make tired men work overtime though they advance their wages 60 per cent., rather than employ fresh men and utilize the unemployed margin held *in terrorem* over the employed.

* Many excellent remarks on these delusions concerning population and wages are given by J. M. Ludlow, *Christian Socialism*, 1851. He observes that not in many trades can a man's children ever compete with him for subsistence; so the 'supplies of labour' must be withheld, if the check is to be generally enforced, for the sake of rival or even distant fellow labourers, perhaps of the second or third generation, and in many cases against a seeming present advantage to the parent. That two can live cheaper together than one, is a common observation among the working classes, and true; while in many trades the demand for infant labour is such that there is a tangible gain in having children, not to be foregone for the sake of the distant contingency of the competing labourers being fewer, a contingency that supposes the man's neighbours are equally self-denying and that no fresh workmen are introduced from another parish, county, or country, nor labour-saving machinery applied.

due to over population, I will not argue farther; nor will I allow my opponents to speak one word about Belgium till they can tell me an end has been made of the hideous anarchy in which that kingdom is sunk, the factory system without factory laws, the employment of women underground in mines, the deluge of drink, and the practice of divers other scandalous liberties. When these matters have for some years been set straight, then, and not till then, will I examine whether that kingdom is suffering from over-population.

§ 307. But if Malthusianism is so great a delusion, how comes it that so many people and such great people are deluded? This question must be answered, or the error will only be half confuted. Answer then I will, that the enemy without further delay may be trampled under foot. First, as already noticed (§ 301), this doctrine affords to the stronger and richer classes an apology for neglecting or oppressing the weaker and poorer; it gives the licentious a weapon against chastity, and the impious a weapon against the belief in Divine Providence, and thus the delusion has on its side the bad dispositions of the heart. Secondly, many are caught by the ears in the ambiguities of language. 'Tendency' is a word having two senses (*vid. sup.* § 17), and in one sense the formula is true that 'population has a tendency to increase faster than the means of subsistence'; but then using tendency in this sense it would be equally true to say that the means of subsistence had a tendency to increase faster than population; or, again, that the pugnacity of mankind had a tendency to depopulate the earth, and would do so but for preventive checks in the shape of civilisation, and positive checks in the shape of many and fruitful marriages. Now all such statements, though not false, are misleading. Instead of saying the given result is due to such and such causes, and trying to assign to each joint-cause its due amount of influence, one cause is singled out, and we say there is a tendency to the result that would ensue if this cause were the only one at work, while all the other causes are classed as checks to the operation of that single one. Now such a method of reasoning may be of use in Physical Science, but in Ethics it is an abuse (*sup.* § 20, and Appendix B.). For we are almost irresistibly led to exalt the single

cause and depreciate the others; they become mere drags holding it back for a time, and at last the word tendency gets to be used in the sense of 'likely,' and the error is complete.* Thirdly, the eyes as well as the heart and the ears favour among ourselves the Malthusian delusion. The towns in the three kingdoms are crowded with people unable to get employment or gain a livelihood; and this visible misery, side by side with these visible numbers, makes weak reasoners think that the numbers are the cause of the misery, somewhat on the principle that if my foot is sore, the cause is the foot, and the remedy is to cut it off.† Fourthly, false analogies from physical science have helped the delusion, as though because in the animal and vegetable kingdom there is a profusion of young animals and plants, and the vast majority of them never come to maturity, the same was to be expected among men; though indeed the view of the baser sort of men as weeds or vermin has much to recommend it. Fifthly, the undeniable truth of the law of diminishing returns, and the limitation of the power of the globe to support more

* Thus the Lord Chief Justice of England, in a well-known prosecution of Mr. Bradlaugh and Mrs. Besant, said in his address to the jury (report in *The Times*, 22 June, 1877): "Mr. Malthus started a theory . . . now an irrefragable truth—that population has a tendency to increase faster than the means of subsistence, and that consequently there must be a vast number of persons upon whom poverty presses sadly and heavily." But the learned judge was deluded. For either he used the word tendency in the scientific sense; and then, what he says of population is a truism that neither was discovered by Malthus nor has the said poverty as its consequence; or he used tendency in the popular sense of likely to happen, and then what he says of population is untrue, and notably in flat contradiction to the statistics accessible to him of wealth and population in England. What sort of credit or blame attaches to Malthus is a matter of little importance. But as he has become surrounded by a cloud of myths, I will say what is sufficient to dissipate them at the end of this Volume in Appendix D.

† So Thornton (*Over-population and its Remedy*, 1846, *ad initium*), instead of proving that over-population is the cause of labourers being out of work, simplifies the matter by *calling* this evil over-population. So all you have to do to prove a man a fool is to call him a fool. Even Mill is so blinded as naively to ask (*Pol. Ec.* Bk. II. ch. XI. § 6): "Is it not allowed on both sides that in old countries population presses too closely upon the means of subsistence?" Of course this is just what population does *not* do, and what by his genuine opponents is *not* allowed.

than a certain number of inhabitants, is misapprehended, as though because over-population is possible, at least in theory, it must be, or is likely to be, an actual and pressing evil; somewhat on the principle that because most of the sickness in England might be the plague, it is so, and the sick must be treated accordingly.

§ 308. But there is a sixth reason which perhaps more than any of the foregoing has contributed to the spread of Malthusianism and its acceptance by men like Mill who cannot be suspected either of stupidity or of being apologists of the richer classes against the poor. They have been deluded by phantoms of the imagination, theories of human nature and wealth, spun out of their heads; wandering in a fancy world of hypotheses, and vainly hoping to keep out of error by making allowance for disturbing causes. These false methods have already in the second chapter of the Introduction been examined at length, and here it is sufficient to say that the doctrine which has been the main stay of Malthusianism is that of the 'Wage Fund' backed up by the doctrines of the rise of 'Rent' and of the tendency of the 'Rate of Profit' to a minimum. We are to understand that there is in the country at any given time a certain amount of 'capital,' or a fund destined for the support of productive labourers, and divided among them by competition. The fewer there are, the more each will get as his wages. The only effective remedy for low wages is to restrict multiplication. Hitherto whenever wages have been high, multiplication has been stimulated: the increase of competitors for the wage fund has reduced the rate of wages till the standard of living has been reached below which the labourers will not multiply. Wages cannot sink lower for any long period, because the labourers will restrict their numbers, and the wage fund, having to be divided among fewer, will allow each to have more. Nor can wages rise higher for any long period; for then multiplication will be stimulated, and the circle be once more described. The great thing is that the standard of life be high, the standard of comfort, that is, which must be reached before the workmen will multiply.

This theory has the charm of simplicity, but it is mere

fancy and verbiage, like most of the 'Political Economy' of the Industrial and Neo-Industrial Schools, and is of less value than the terms and reasoning of the astrologers. The 'labourers,' the 'wage-fund,' the 'rate of wages,' and the 'standard of living' are mere words with no things to answer to them. Plainly the vast majority of the world's inhabitants in the present and the past, as far as known to us, are excluded from the operation of this 'law of wages.' For either they do not work for hire, or if they do, their wages are not regulated by competition. And thus the alleged need of restricting multiplication in the interest of the labourers does not exist for the great bulk of mankind. And for the rest who do work for hire, and whose wages immediately depend upon the terms of a bargain made with a master, it may well be said that *if* their position is as alleged, the best remedy is not to force on them Malthusianism, but to remove them from a position where there is only the alternative of Malthusianism or misery, and to assimilate them to the bulk of mankind. It may also be said, that as long as they stay as they are, they really have not the alleged alternative, but must be miserable, because (as noticed *sup.* § 306, *ad fin.*) they must be combined and act in concert if they are to regulate their numbers; and, they are by the hypothesis uncombined and competing. But in fact, even though we limit the word labourer to mean the hired agricultural and manufacturing labourers of Great Britain, they are not in the position alleged. The aggregate sum they receive in any year is not a fixed sum they will get anyhow, but variable, and the variations are dependent on various causes, notably the demand of customers and the coalitions of the workmen, that are independent of population. And competition (as Cliffe Leslie has well shewn, *Land Systems*, Appendix) does not equalize wages; nor are the various rates that actually exist determined solely by competition. Neither, again, is there any truth in the alleged see-saw between high wages with swarms of children and low wages with celibacy. No doubt when among any particular class of workmen wages are high, there are likely to be more marriages, and conversely in a period of distress. But this does not give us the faintest presumption that the

cause of the high wages is the fewness of previous marriages, and the cause of the distress their abundance. The oscillations of wages among many branches of manufactures in England have followed the oscillations of trade (*sup.* § 306), wholly regardless of any variations in the rate of increase of the population. Finally, for I will not waste more time over these fantastic delusions, they presuppose the false theory already refuted (*sup.* § 262) of 'labourers' being 'supported' by 'capitalists.' In reality, in the main, the industrial labourers 'support' themselves, and are the producers of their own wages. If they all in Great Britain took to Malthusianism and excluded foreigners, there would be fewer labourers and smaller produce, but no reason, unless our laws and manners were changed, that the relative proportion of their class who are ill-paid, overworked, out of work, disabled, superseded by machinery, by horses, or by pasture, should be any less.*

§ 309. The victims of the wage fund delusion have been, as I have already noticed, confirmed in their errors on population by their doctrines on profits and rent. I need not for the present purpose drag my readers through the thorny maze of their perverse speculations. It is enough to say concerning the alleged tendency of the rate of profit to a minimum, that there is no such thing as a rate of profit to tend any way, and that the facts really to be observed (as distinct from fictions) about the rate of interest on various kinds of loans, and the price of various kinds of securities, do not give any reasonable ground for attributing misery to over-population. Concerning rent, using the word as the Malthusians do, it is enough to say that a progressive rise of rent in any country as population increases does not in the least shew that the increase of population is causing misery, nay, not even that there is the least increase in the cost of getting food. No doubt the existence of rent in the sense in question does shew, that to meet the demand for food there has been recourse to inferior lands or less remunerative outlay, whereby the better lands and previous outlay yield rent. No doubt also, if we assumed that there was never

* See some further remarks on the delusion of a wages fund in Appendix E.

any improvement of the arts, such rent would shew that food was got at a greater average cost, and such rent would consist, not in any more bushels of corn being got from the better lands, but in each bushel being sold for more than it used to be. But we have no business to make the assumption of non-improvement. On the contrary, improvement may keep pace with increased demand for food, and it may become worth while to cultivate inferior lands, not because the produce can be sold for more, but because it can be raised for less than formerly, while the rent that the better lands now yield consists, not in each bushel being sold for more, but in there being more bushels got to sell. Thus there may be a progressive rise of rent and increase of population, while the cost of food remains, if we take an average from any considerable number of years, at the same level as before. And this possibility, which is all that I need prove, seems to have been the actual fact in England for some centuries past. The money-price of grain gives us some indication; and Cairnes asserts (*Leading Principles of Polit. Econ.* Pt. I. ch. V. § 3) "that at all events since the beginning of the seventeenth century the normal price of wheat has not risen in England more than the depreciation of the precious metals since that time will fully account for." And he has no doubt the date might be put some centuries further back. I do not indeed assert a universal equilibrium between improvements in the arts and increase of population, so that the cost of staple foods keeps at the same level; but I think an equilibrium frequent and normal.* Of course the great exception is where new colonies are planted in fertile virgin soil by those who, in an old country, have already advanced far in agricultural skill. As the new country becomes closely peopled the cost of food will increase till the level of old countries is reached. But when that level is reached there is no reason to suppose that the cost will go on rising, but rather remain the same. Finally, let us once more recal the

* In France the average decennial price of corn did not rise at all between 1797 and 1847. Passy in the *Journ. des Economistes*, 15 Oct. 1848, mentions lands that thirty years before produced scarcely twelve hectolitres but now 20; giving an extra return of 170 francs at an extra cost of only seventy-five (Roscher, *Nationalökonomie*, § 157, note 7).

ideal of population (*sup.* § 292-294). We ought to have no wish, even if we could do it, to arrest the colony in its rude unpeopled abundance. We ought to have no fear of an increase of numbers, though it will be harder for them to get a living, because the more people the better, as long as there is no real over-population (§ 295); and there is no danger of this in a good economical constitution; and where there is a bad constitution there will be misery whether the population is scanty or abundant. And there is this peculiar absurdity in recommending the limitation of births as a cure or preventive of misery. For precisely this limitation, by fostering immorality, and striking a blow at the family tie, at parental authority, and at the mutual help and insurance of brothers and kindred, is one of the most fertile sources of misery.*

§ 310. I have done with the Malthusians; for I will not sully these pages with the filth of their proposals nor give one single reference or one single name. But a few words must be given to a theory which in some ways is akin to Malthusianism, but differs from it notably in this, that misery and degradation are not regarded as simple evils to be combated, but are considered as a necessary part of evolution, whereby the human race is elevated and developed. This doctrine has for its formula the struggle for existence, the survival of the fittest, and the hereditary transmission of acquired qualities; and can be called with convenience economical Darwinism. Whereon I need say but little, for two reasons. First, the matter has been treated by a recent popular writer with great acuteness and lucidity (see Mr. Henry George's *Progress and Poverty*, Book X., from which I shall borrow much). Secondly, although it is not difficult to refute this theory, like all other kinds of historical gnosticism (*sup.* § 27-29), such refutation is but a negative process, and some new evolutionary theory may be started to-morrow requiring us to begin over again the tiresome work of refuting. Plainly then for such diseases of the mind prevention is better than cure. And the safest way to prevent them, as I have already remarked (*sup.* § 32), is by a

* Périn, *de la Richesse*, 2nd ed. I. pp. 499-501, well marked the course of Malthusianism through selfishness, idleness, and licentiousness, to dénuement physique and misère morale.

serious study of economical history. But historical studies are precisely what I am compelled to reserve till the next Book ; and thus not till then can I offer the student a proper safeguard against the charms of historical theories. At present I can but refer to the warnings already given on the difficulties of generalisation (*sup.* § 30, 31) ; and I will conclude this Book with a few negative criticisms on the economical Darwinism that is prevalent, and the loose manner of thinking and speaking concerning progress and civilization.

The Darwinian theory applied to society may be put as follows (I cite Mr. George, *l. c.* Bk. X. ch. I.) : "That the struggle for existence, just in proportion as it becomes intense, impels men to new efforts and inventions. That this improvement and capacity for improvement is fixed by hereditary transmission, and extended by the tendency of the best adapted individual, or most improved individual, to survive and propagate among individuals, and of the best adapted, or most improved tribe, nation, or race to survive in the struggle between social aggregates . . . In this view, progress is the result of forces which work slowly, steadily, and remorselessly, for the elevation of man. War, slavery, tyranny, superstition, famine, and pestilence, the want and misery which fester in modern civilization, are the impelling causes which drive man on, by eliminating poorer types and extending the higher ; and hereditary transmission is the power by which advances are fixed, and past advances made the footing for new advances. The individual is the result of changes thus impressed upon and perpetuated through a long series of past individuals, and the social organization takes its form from the individuals of which it is composed."

This theory, like all others of any plausibility, displays various truths in caricature. Thus it is true that necessity is the mother of invention ; that parents are stimulated to think and to labour for the sake of their children ; that the young go forth from their homes, perhaps to the other side of the globe, to get their living. As Virgil tells us in his *Georgics* (I. 121-124) :

Pater ipse colendi

Haud facilem esse viam voluit, primusque per artem

Movit agros, curis acuens mortalia corda,

Nec torpere gravi passus sua regna veterno.

Only these efforts should not be called the struggle for existence, which implies fighting, not with difficulties, but with our fellow men. Again, all the evils of the world work together by mysterious dispensation of Providence for the good of the elect; and each individual can make every calamity that comes upon him a means of obtaining celestial goods. Thus war, and slavery, and the rest of the catalogue of woes, may be said, in a sense, to work for the elevation of man; only not in the Darwinian sense. Again, in a fight, the strongest will undoubtedly prevail; only the strongest need not be the best. And undoubtedly a part of the characteristics of each individual are due to heredity, only not the whole (*vid. sup.* § 87).

§ 311. Against economical Darwinism we have a right, just as against Malthusianism (*sup.* § 301), to use the argument *ex consequenti*, and say it is immoral and mischievous, shifting from the rich few all responsibility for the suffering many, damping the ardour for justice and reformation, freezing the fountains of charity, and without an effort to help him, allowing Lazarus to be crushed to form the roadway for the car of progress: and therefore is a false doctrine, as leading to absurdity. But we do not need the argument; for like Malthusianism, this doctrine is contrary to facts. Even a mere glance at history can teach us that the alleged progression and elevation of man in any period known to us is a fiction. "The earth is the tomb of dead empires no less than of dead men. Instead of progress fitting men for greater progress, every civilization that was in its own time as vigorous and advancing as ours is now, has of itself come to a stop. Over and over again, art has declined, learning sunk, power waned, population become sparse, until the people who had built great temples and mighty cities, turned rivers and pierced mountains, cultivated the earth like a garden and introduced the utmost refinement into the minute affairs of life, remained but in a remnant of squalid barbarians, who had lost even the memory of what their ancestors had done, and regarded the surviving fragments of their grandeur as the work of genii, or of the mighty race before the flood" (George, *l. c.* p. 436). Archeological discovery makes this fact of reiterated retrogression more plain every

day. The magnificent ruins discovered in Java and Cambodia, in Mexico and Guatemala, tell of extinct civilizations. The labours of scholars have begun to disclose the wonderful civilization of the pre-Semitic Accadians who lived in the Babylonian plains. The art and learning and wealth of Egypt, and its decline, can be traced ; and the more we get to know of the Roman Empire, the more we are amazed at the skilful arrangements of antiquity for health, comfort and pleasure, the more we perceive that many of our modern discoveries are merely rediscoveries.* And in recent centuries an instance of decline on a grand scale may be seen in the case of the civilization, that arose so unexpectedly, of the Arabs, who developed a magnificent literature, a profound philosophy, made great advances in physical science, were skilled in many industrial arts, in particular were admirable in their agriculture, while in the decorative arts they equalled even the ancient Egyptians, and in architecture have never been surpassed before or since. And look at them now ! Then, secondly, as Mr. George remarks, whether or not each succeeding civilization is better than the one before, the evolution theory is alike disproved ; for in every case the race that starts the new civilization is not the race that has been educated and modified by hereditary transmission, but a new race coming from a lower level of knowledge, skill and wealth. And thirdly, to say there has been a gradual elevation of the human race physically and intellectually

* The following passage from *The Times*, 26 Dec. 1882, is an illustration :—

POMPEII.—Our Correspondent writes from Naples :—"A discovery has lately been made in Pompeii which is well worth noting. Not many days have passed since a quadri-valve speculum of great beauty and in a high state of preservation was turned up. By competent persons who have examined it, the mechanism of it is said to be very ingenious. In the National Museum of Naples there are now three Pompeian specula—one a bi-valve, one a tri-valve, and the one just found a quadri-valve. The last is said to be of a construction so uniform and well proportioned admitting the expansion of the valves, as to be superior to modern construction. It is noted as a curious fact that in its various dimensions it observes constantly the centimetric measurement. It will be found, in fact, on inspecting the National Museum of Naples that many of the instruments ascribed as inventions to moderns are clearly only exhumations of the past."

is to disregard the evidence. "We know from classic statues, from the burdens carried and the marches made by ancient soldiers, from the records of runners and the feats of gymnasts, that neither in proportions nor strength has the race improved within 2,000 years . . . the assumption of mental improvement is still more preposterous. As poets, artists, architects, philosophers, rhetoricians, statesmen, or soldiers, can modern civilization shew individuals of greater power than can the ancient?" (*Ibid.* pp. 451, 452.) And on the other hand there is no evidence to shew that the present civilization of Europe and America may not decline as others have before; and in several countries on both sides of the Atlantic there are signs of evil omen for the future. I do not say that we are on the eve of a dreadful period of destruction and bloodshed. I only say that the evolutionists cannot satisfactorily shew us, as they ought to be able to, that we are not.*

* Although I cannot agree with all in Mr. George's chapter on 'How Modern Civilization may Decline' (Bk. X. ch. IV.), it contains much that is worth attention, for example, the following passage (p. 484): "Whence shall come the new barbarians? Go through the squalid quarters of great cities, and you may see, even now, their gathering hordes! How shall learning perish? Men will cease to read, and books will kindle fires and be turned into cartridges! It is startling to think how slight the traces which would be left of our civilization, did it pass through the throes which have accompanied the decline of every previous civilization. Paper will not last like parchment, nor are our most massive buildings and monuments to be compared in solidity with the rock-hewn temples and Titanic edifices of the old civilizations. And invention has given us, not merely the steam-engine and the printing-press, but petroleum, nitro-glycerine, and dynamite." If people would study the Politics of Aristotle and above all the History of Polybius a little more, they would be wiser. "Of a truth," says Roscher with penetration (*Nationalökonomie*, § 204, note 9), "all that can be called tradition, popular political beliefs, and national sense of justice, had been changed among the Greeks into reasoning and argument, and these discussions directed with dreadful exclusiveness to the contrast between the rich and the poor." And a vast decline of Greek civilization was the result. How natural it is for a civilization to decay of itself can be seen from the following passage. "In all human things," says Cardinal Newman (*Lecture on Barbarism and Civilization* in his *Lectures on the Turks*, 1854, pp. 211-213), there is a *maximum* of advance . . . The cultivation of reason and the spread of knowledge for a time develop and at length dissipate the elements of political greatness; acting first

§ 312. Am I then denying the progress and civilization of the nineteenth century? Not at all. I am only unable to understand why, when these words are mentioned, the ordinary rules of reasoning should be suspended. And thus I propose briefly to examine first the words and then the things they express. It seems to me that if the words *civilized* and *civilization* are to be of any use, they ought to be taken somewhat in the following sense. A nation (§ 252) is to be called civilized if it have the seven following possessions: first a town or towns of a size to merit the name; secondly an upper class having a certain stock of wealth and leisure; thirdly a certain measure of political order and power; fourthly a certain measure of skill in agriculture and the other industrial arts; fifthly some tincture of science, some philosophy, physics, history, and geography; sixthly a written literature; seventhly some skill in the fine or at least the decorative arts. And civilization itself should be taken to mean, not the whole condition of a civilized nation, but its condition in regard to wealth, to the industrial arts, to science, to literature, and to the fine arts. It is the sum of certain relations of a certain kind of nation. And a nation (or country) is more civilized—is in a higher state of civilization, the richer it is, the greater its industrial proficiency, the more profound its science, the more splendid its literature and art. But civilization is not to be measured by the con-

as the invaluable ally of public spirit and then as its insidious destruction . . . The sentiment of sacredness in institutions fades away, and the measure of truth or expediency is the private judgment of the individual. An indefinite variety of opinion is the certain though slow result; no overpowering majority of judgments is found to decide what is good and what is bad; political measures become acts of compromise; and at length the common bond of unity in the State, consists in really nothing common, but simply the unanimous wish of each member of it to secure his own interests . . . Selfishness takes the place of loyalty, patriotism, and faith; parties grow and strengthen themselves; classes and ranks withdraw from each other more and more; the national energy becomes but a self-consuming fever, and but enables the constituent parts to be their own mutual destruction; and at length such union as is necessary for political life is found to be impossible. Meanwhile corruption of morals, which is common to all prosperous countries, completes the internal ruin, and, whether an external enemy appears or not, the nation can hardly be considered any more a State."

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dition of religion, or morality, or happiness of the whole country, nor by the condition of the masses. It has no immediate concern with a virtuous life, with economical or political well-being. No doubt the word is often used as though it had. But this deprives it of all value; and we should have to say that the Romans in the time of Tacitus, in all the splendour of their gorgeous civilization, were less civilized than the Germans, who with regard to the well-being of the mass of the population and the morality of all, undoubtedly surpassed them. Much more to the purpose is that other popular manner of speaking that distinguishes the vices and the virtues of civilization from the vices and virtues of uncivilized (rude, or barbarous) nations, instead of vainly making virtue a characteristic of civilization, and vice of barbarism.

So much on the word civilization. The word *progress* differs from it in many ways, among others in being used in the common affairs of life; and is sometimes used to express, not a beneficial advance, but the increase of some evil, as when we speak of the progress of a fire or a disease. But if the word is to be of any service in Economics and Politics it must be distinguished from mere change or movement, and must be taken to mean an increase of the quantity or a bettering of the quality of some good (§ 47). To talk of progress by itself, without making clear what is the particular good to which it applies, seems to me to be talking to no purpose. I confess indeed I have cited passages in the previous section, in which the word is thus used by itself; but they can all be interpreted to mean the progress of civilization, the becoming more civilized. The term material progress is not the same as the progress of civilization, for it does not regard advance in science, art, or literature, and perhaps not even advance in technical skill and the economical arts, but means primarily an increase in any country of aggregate wealth and population. Still, it is part of the progress of civilization, because wealth is part of civilization; and there cannot be much progress in wealth without progress in population (*sup.* § 256). It is otherwise with moral progress. This term is used even in official documents with perplexing obscurity. I cannot see why it

should mean anything else than an improvement in the moral life of any given body of men, an improvement, that is, either in quantity, more men leading good lives, or in quality, the good men leading better lives. And such improvement is quite distinct from either the progress or the decline of civilization. Numberless other kinds of progress can be distinguished, and we can say, that, within limits, the narrower the object to which the word progress is applied, the more useful is the word and the more accurate our reasoning. Thus we are more likely to make mistakes when talking of moral or of intellectual progress than when talking of the progress of temperance, or of conjugal affection or fidelity, or of filial piety, or of moral recreations, or again of the progress of the quality of the knowledge or of the number of persons knowing about chemistry, or Hebrew, or astronomy, or philology, or jurisprudence, or Patristic literature, or Egyptology, or Roman antiquities, or English history, or metaphysics.

§ 313. So much on words. Now on the things they express we are taught by history with irresistible evidence this, that there is no likelihood, much less necessity, for a simultaneous progress in all kinds of goods, but that habitually at the same time and in the same place there is progress in one and decline in another, a perplexing combination of gain and of loss. For example there is no ground for expecting that material progress and progress in the quality of science in a nation will be accompanied by progress in the intellectual culture of the great bulk of the population. On the contrary, there has been seen in more than one country a differentiation in this as in many other matters; and the mental cultivation of the masses may sink lower and lower while the richer classes grow more learned in the sciences: instead of a scholar being nearly synonymous with a beggar, as in the constitution of mediaeval Europe, the common combination in fact and in language may be that of a scholar and a gentleman; it comes to pass that the richer classes are those who study the *Odyssey* and the *Nibelungen-Lied*, while the masses, instead of listening to the heroic lay or the religious and historical drama, have to look to the newspapers, and the cheaper and lower kind

of them, for their intellectual food. The opposition between wealth and morality, how the second declined with the progress of the first, was a commonplace in old times, and by no means unfounded. And mark how political greatness has not popular happiness for its partner. As the power of Rome progressed and spread over all the countries round the Mediterranean, the peasantry of Italy sank from their prosperity and contentment, and the misery rose in time to such a pitch as to arouse the Gracchi to attempt their measures of reform. The English empire also which arose in the reign of George III. shews a simultaneous progress of political power and retrogression in the happiness of the people. Even among the goods which constitute civilization, the same phenomenon of some progressing and others declining is to be observed, so that it is often difficult or impossible to say whether the civilization as a whole is advancing or receding. There may be better technical methods of weaving or smelting, and worse methods of cooking and cleaning. One branch of knowledge may be progressing, another declining; specialists in every branch may know more than was ever known in that branch before, while those who have commanding and general knowledge may be growing fewer every day. And a mere superficial acquaintance with the course of literature, music, painting, sculpture, and architecture during the last six centuries in Europe, ought to convince any one of the irregularity both of their upward and downward courses. No doubt in four departments of civilization there has been in most countries of Europe during the last hundred years a great advance. First, in simple wealth and its necessary accompaniment of population; secondly, in the historical sciences; thirdly, in the physical sciences; fourthly, in many of the industrial arts. An old manual of philology or Egyptian antiquities or mediæval history, or again of geology or physiology, is as deservedly thrown away as a muzzle-loading gun or antiquated machinery. These four kinds of progress are good things, the second in particular ought to be a matter of rejoicing. There are indeed fantastic economists (§ 44), I believe, and others, who rail against some of these advances; but we want reasoning not railing; nor do I understand why

we cannot look at the matters in which there has been progress without losing our wits, nor why, because we recognize and applaud reforms, inventions, contrivances, and remedial legislation, we must be blind to the corruptions, degenerations, abuses, that make a necessity of reform.

§ 314. Now from what I have already said it is clear we must not on the ground of these advances speak of 'the present age of progress,' or of 'our progressive state,' or use any such phrases, which are mere verbiage wholly unfit for students. Nor can we even speak of the progress of European civilization without first making further inquiry. For the four advances I have named do not cover the whole field of civilization; and we must look at the remainder to see if there are no declines to set off against the advances. As a fact, although there has been, I think, as far as we can cast up accounts in these matters, a net gain, at least in England, in mere civilization (which, mark, does not include religion, morality, happiness, and popular culture), there has been a decline in several departments. I need only refer, without repeating it, to what I have already said on the exhaustion of the soil, the draining elements of fertility into the sea, the pollution of streams and of the air, the spread of noxious animals and plants, the exhaustive working of mines and fisheries, the sterilization or ruin of hill-sides, valleys, and coast lands by destruction of forests, and that many technical triumphs are merely reparatory (§ 81-84). We have seen the artistic losses through the introduction of machinery (§ 81); and art, remember, is part of civilization. We have seen also the loss of wealth through dishonesty and through the spoiling of unsold goods, and how through the spread of buying and selling the field for these losses was widened (§ 104, 211); in particular the incalculable loss, and technical decline, and artistic degradation through the production of bad commodities, such as bad clothing, bad furniture, bad houses (§ 104, 115, 187, 188, 207, 212), and again, bad drink (§ 178). And I have spoken of the losses through wasteful use of food, fuel, clothing and domestic utensils, and the decline of skill in cleaning and mending and other domestic industries, both evils due in part to the housewives among the poorer

classes having become ignorant and untrained, and the servants of the rich having become lamentably deficient in knowledge, in care, and even in honesty (§ 104, 158, 159, 175, 203, 211). The decline in all these matters must be set off against the advance in those others; and the rest of the catalogue of the goods of civilization must be examined to see whether there is any change, and if so, whether it is progress or retrogression. Further, to suppose that those aforementioned advances will move during the next hundred years at the same rate as during the last hundred years, is irrational; we might almost as reasonably argue that the deterioration of houses and clothes will go on till a house will only last a week, and a coat only a day. Nor must we forget that if we look back more than a hundred years, or compare our civilization with previous ones, there are many notable points of present inferiority. How contemptible would our apparatus for washing and bathing, our theatres and gymnasiums, our public gardens and private villas appear to a Roman of the time of Caracalla! How utterly inferior our dress compared with that of the ancient Greeks or our own Anglo-Saxon forefathers! How poor our architecture and much of our art compared with what they were centuries ago, or with those of other civilizations! No doubt we surpass them in some things; but precisely this confirms the point I am urging, that we meet a bewildering complexity of loss and gain, and that there is no evidence, even if we look only to the goods of civilization, of a uniform and universal advance, or of a uniform and universal decline. Finally, let us again call to mind, that there can be progress or retrogression in other goods besides civilization, and in goods that are much more important, notably the moral life of a people, and their happiness (which last indeed mainly depends on their moral life), and the lesser but still important good of the mental cultivation of the lower classes. Now I think there are grounds for inferring a likelihood, or at least, that it is as likely as not, that these goods will all decline as a civilization advances, that the poor will sink into degradation, and the cultured few be intellectually elevated at the cost of the many, unless these many are protected by a strong religion. This I think likely (*cf. sup.*

§ 251); and I am certain that the Christian religion, if it is allowed to dominate a society, will secure all these goods, and that it is hostile to none of the goods of civilization as far as they are not (like the Greek gymnasiums, the Roman baths, the French theatres, and the English gin-palaces) in opposition to those other and greater goods. Poverty and pain indeed will not be cast out; but they will in part be lessened, and for the rest explained and made endurable. But this is by the way; for what I am now urging is the need of distinguishing the different kinds of progress, and recognizing the intermixture of gain and loss, the complexity of the matter, and the frivolity of speaking of progress in general without specifying in what.

§ 315. And now, as the conclusion of this Book, I will repeat two warnings. The first is against all the delusions of all the varieties of fanaticism. The light of day dissolves the rosy dreams of dawn; and the hopes of reformers and philanthropists, each with his panacea, are incompatible with the facts of human nature and of history. There is no such thing as a panacea; and these enthusiasts can do so little that we must needs smile at the ridiculous divergence between the programme and the performance. We have met many of them in the course of this Book, the free-trade fanatics, the Socialists, the vegetarians, the teetotalers, the sanitary reformers, the zealots for education, the champions of national compulsory insurance, and the Malthusians, most of them, though not the last, being amiable, but still irrational. I have had occasion several times in this chapter to cite and to praise Mr. George; but he too is a fanatic; and when he gravely tells us that "all the injustices which distort and endanger modern development" flow from the private appropriation of land (*l. c.* p. 305), and that to "appropriate rent by taxation" is "the simple and sovereign remedy," which, among other advantages, will abolish poverty, elevate morals, taste and intelligence, and purify government (*ibid.* p. 364): such professions bear on the face of them their own refutation. Like the rest of the Socialists he fails to see, that the social evils of the world are not the result of a mistake or to be cured by a contrivance, but have arisen because human nature is

fallen and man is prone to evil from his youth. And like other Socialistic schemes his also presupposes a human nature that would render it superfluous. In truth our capacities are but limited, our intellect is but weak, our will is but feeble ; nor do we make things any better by pretending we can climb up into the skies. What, then ? Are we to say that every social reformer is a fool for his pains, that we cannot make the world any better, that the only sensible course is to make it, as far as we can, a pleasant world for ourselves ? Are we to steel our hearts, and bid the young repress their ardent sympathies, their unselfish enthusiasm, and school themselves into a sober and rational indifference ? God forbid ! And I will hasten to give the second warning I spoke of, and which precisely is against every variety of cynicism. For the simple devotion and ardour of youth are among the fairest things on earth, and any doctrine, such as materialistic philosophy, that would cut at their roots, stands self-condemned. But then also any doctrine that would cut at the roots of human reason stands equally self-condemned ; it is not fit, even for the young and the simple-minded, to delude themselves with the follies of fanaticism ; and we seem caught on the horns of a dilemma. Now those to whom the soul is a word and the supernatural a fancy, I cannot help out of the difficulty, and they must take their choice of being simpletons or cynics. But for others the solution is simple, and is based on the value of the supernatural. There are abundance of reforms in our own country and many others, which if carried out would indeed not make every one comfortable, or prove a panacea, but would effect some improvement in the moral life of the people. Now our religion teaches us that one supernatural act is more worth attainment than all the goods of a dozen civilizations. It follows that all the enthusiasm irrationally bestowed by the various sects of fanatics on their several schemes can be rationally bestowed by Christians on economical and political reforms that have a reasonable probability of promoting a pious life. No doubt the ministers of religion are those who go straightest towards the goal ; but only a few are called to work in this direct and immediate way for the end of man ; and the rest

are called to work, for the same end indeed, but in the main indirectly. Such labour is not folly, nor vanity, nor a delusion, but indeed worth while and worthy of enthusiasm ; whereas all enthusiasm that is not supernatural is weakness, and all labour that has not a supernatural end is vanity, and misses the mark, and is busied with trifles. So the last word of economical science on all the strivings of man is no other than that of religion : *Vanitas vanitatum et omnia vanitas, praeter amare Deum et illi soli servire.*

APPENDIX.

A. (See § 4.)

SCIENCE AND THE ARTS.

To avoid confusion on science and the arts let us first notice that both may be used either in an *objective* or *subjective* sense, that is, either as the *body* of truth (or of rules) in question, or else as the *knowledge* of those truths (or of those rules). Then, as regards the True (*verum*) and the Good (*bonum*), let us remember the principle of St. Thomas, *Summa Theol.* 1^a, qu. 79, art. 11, who, while proving the identity of the speculative and practical intellect, says: “dicendum, quod verum et bonum se invicem includunt. Nam verum est quoddam bonum, alioquin non esset appetibile; et bonum est quoddam verum, alioquin non esset intelligibile. Sicut igitur objectum appetitus potest esse verum, inquantum habet rationem boni, sicut cum aliquis appetit veritatem cognoscere; ita objectum intellectus practici est bonum ordinabile ad opus sub ratione veri. Intellectus enim practicus veritatem cognoscit, sicut speculativus; sed veritatem cognitam ordinat ad opus.” Thus it can be said that the knowledge of the truth is the common aim of all the sciences, and that for all there is a further practical aim, namely the spiritual or temporal benefit which this knowledge may bring.

A distinction can no doubt be made between theoretical and practical sciences (*scientiæ speculativæ—practicæ*); but this distinction is not to be based upon their aiming at a different end, but upon their regarding a different object, or rather a different aspect of the same object, which for the one is Being in itself, *ens reale*, *das Seiende in sich*, for the other, Action, *ens morale*, *das Handeln*. See Stöckl, *Lehrbuch der Philosophie*, I. pp. 321, 322, 2nd edit. Perhaps however it can be said that the practical sciences have *more* regard to our will and *less* to our intellect than the theoretical.

But if we define philosophy, *cognitio rerum per causas ultimas*

et altissimas naturali lumine comparata (Stöckl, *l. c.* p. 4) ; the best division seems the ancient one into real, rational, and moral philosophy, according to the triple aspect of Being. Cf. Stöckl, *l. c.* p. 6. The following passage from Liberatore, *Institutiones philosophicae* I. p. 15, ed. 4^a, puts the matter clearly : " Ens sub triplici forma et aspectu considerari potest, nimirum vel quatenus reale est, et attributa possidet a mentis consideratione non pendentia ; vel quatenus ideale est, et attributis subjicitur a mentis consideratione derivatis ; vel quatenus morale est, et terminat actus voluntatis bonum appetentis. Ergo philosophia . . . dividi poterit . . . in philosophiam . . . realem, rationalem, moralem. Prima speculatur entia prout in se sunt, vel in suis causis, et in tres partes dispescitur, Physicam, Mathesim et Metaphysicam, prout ens considerat vel sensilibus mutationibus substans, vel sola quantitate affectum, vel ab utriusque praecisum. Altera speculatur entia non prout in se sunt, sed prout ab actibus rationis denominantur, et appellari poterit Logica. Tertiā speculatur entia prout obijciuntur actibus voluntatis, quae in eorum appetitionem sub dictamine legis naturae fertur, et dicetur Moralis, ex qua Jus naturae derivatur. Cf. Stöckl, *l. c.* § 2, distinguishing *das Seiende in unserm Denken*, *das reale Sein*, and *das Seinsollende*.

And now, coming to the main point of this Appendix, let it be noticed that moral philosophy or science (*scientia moralis*) in the subjective sense of a habit (*habitus*, ἕξις) differs both from the habit of Prudence (*prudentia*, φρόνησις) and from the habit of any art (*ars*, τέχνη). It is indeed so far like Prudence that both regard moral action ; but is unlike "inasmuch as Prudence is a habit determining what is to be done *hic et nunc* in order to our last end ; whereas moral philosophy only determines *in universali* what is to be done in order to our last end, and not what is to be done *hic et nunc*" (Sylvester Maurus, *Aristotelis Opera*, t. ii. p. 1, Romae, 1678). Again, moral science is indeed so far like the habit of any art, that both relate to generals not to singulars ; but is unlike, inasmuch as it regards the end of man ; whereas each art only regards a particular end without regard to morality. Thus *scientia moralis* differs both from *prudentia* and *ars*. These two last are doubly unlike each other, *prudentia* looking to what is to be done *hic et nunc* and in order to the end of man, *ars* looking to what is to be done *in universali* and in order to some particular end. As a fourth term, standing to any art as Prudence stands to Moral Science, can be put Skill (*sollertia* or *dinotica*, δεινότης, cf. Aristot. *Eth. Nic.* Bk. VI. c. 12, and S. Thom. *Sum. Theol.* 2^a 2^æ Qu. 47, art. 13), that is, practical capacity for immediate and particular action in any art as

opposed to theoretical knowledge of what is to be done in general ; for an art, let us remember, no less than science is theory. Let us also be careful about the word practice. In one sense it means action itself ; in a second sense, the skill acquired by action. In this second sense it is not exactly equivalent to the skill described above ; for that might come from knowledge of theory as well as from repetition of action, and applies to all capacity for action howsoever acquired. The proper word however for capacity acquired *only* by action and on the part of one ignorant of theory, is, I think, not practice, but 'knack' or 'empiricism' ; and this was one sense of the Greek *εμπειρία*, which is thus not the same thing as *δευρότης*.

From what has been said on the distinction between Moral Philosophy and the arts it follows that we must distinguish human action in its moral aspect (*actio*, *πρᾶξις*) from human action as applied to some particular end (*effectio*, *ποίησις*) ; and that moral science regards the first, the arts regard the second. Mill's view of 'Morality' as an art (see his *Logic*, Bk. VI. Ch. XII.) I suppose stands or falls with the phenomenalist philosophy ; and so falls. And it seems to me that Cornewall Lewis (*Methods in Politics*, ch. xix. § 1) when he objects to the restriction of art 'to those operations physical or mental in which something is produced,' and urges that there can be an 'art of action as well as of production,' and that a 'course of conduct can be made the subject of a body of precepts' : misunderstands Aristotle (see *Eth. Nic.* Bk. VI. c. 4 and 5), who would surely consider as *ποίησις*, and put under *τέχνη*, a 'course of conduct' aiming at some particular end, as dollar-hunting, place-hunting, or military tactics.

B. (See § 20.)

KANT'S WRONG METHOD IN POLITICS.

Ferdinand Walter, *Naturrecht und Politik*, § 12, 2nd ed. 1871, speaking of the wrong methods of social science (Rechts-philosophie) has the following passage on Kant and his school: "Another method proceeds primarily by pure logical ratiocination without looking at the appearances of the actual world, to obtain a first principle, a pure formal principle of law (ein rein formales Rechts-princip) as they say, which is to be the maxim of social life (Co-existenz der Menschen). From this are derived, as best may be, all rights and legal relations (Rechte und Rechtsverhältnisse); by this they are tested, and either approved or rejected. And thus a distinction is made between pure and applied natural law (Natur-recht). This method began with Kant and for a time was dominant. The following are the grounds why it is untenable. First, it puts the starting point of law in an unreal world, constructed simply by logical ratiocination in a manner more or less arbitrary. Secondly, it is impossible to derive the realities of life from a purely formal empty first principle; we must learn them by observing the totality of human nature; and indeed that we must do so, is shewn by the so-called 'applied' natural law of this system, where all through we have to abandon or be abandoned by the first principle. Thirdly, legal relations are too multifarious and peculiar to allow us to get by abstraction a common first principle, even though this has only to serve as a measure of how far they are reasonable. Thus the Kantian first principle of freedom, right enough in a certain set of legal relations, is quite fruitless for others, as for marriage, patria potestas, and inheritance. Fourthly, this method looks on man as an individual only, and puts in a sort of subordination or opposition to him the family, the State, and the Church; when really these social institutions are essential to him and rule over him; and thus Kant does not get beyond what is subjective and superficial. Fifthly, this method stands self-condemned, because its followers have after all failed to agree on the first principle, each formulating it after his own fashion." (§ 12.)

C. (See § 306.)

NATURE OF A COMMERCIAL CRISIS.

What follows is mainly taken from what I wrote in the *Dublin Review*, October, 1877, pp. 365, 366. A crisis such as that of 1857 or of 1866 in England, or of 1873 in Germany and the United States, is mainly the settlement of who is to bear the loss of a vast *previous* diminution of wealth. And the same may be said of 'slackness' or 'depression' in various groups of industries and of some kinds of agricultural depression. These crises are quite different from the mere settlement after a gambling mania, as in France after the schemes of Law, and in Holland at the great tulip mania in 1636. Now the previous diminution of wealth is due partly to deficiency of production, partly to excess of enjoyment. Wealth has been wasted in useless enterprises, barren mines sunk, railways made in deserts, bridges built where there is no traffic, factories with costly machinery set up to make goods for which the present means of production are sufficient, shops set up where there is no trade, stores of materials collected that are not wanted, intense and perhaps exhaustive agriculture to raise a crop that is at a speculative price, neglect of repairs and improvements: the result of wild speculation and eagerness to be rich, fostered by lax laws on property and responsibility. So in Prussia, whereas in some 80 years up to 1870, only 300 joint stock companies had been established, no less than 780 were established in the two years of 1871 and 1872, of which the greater part perished in the crisis of 1873 (*Fraser's Magazine*, Jan. 1877). So in the United States, according to a calculation in *The Times*, 3 Feb. 1876, there had been up to about that time some £97,000,000 paid by the Americans themselves, and £46,000,000 borrowed from abroad, for railways that could not pay their way, or had to be reconstructed at a heavy sacrifice. Further, there may have been deficiency in production in the shape of bad harvests or failure of particular crops, or cattle plague, or interruptions through war. And when a country has a large foreign trade the sudden failure of a foreign country (through calamity or policy) to produce the accustomed equivalent, renders idle the means of

producing what used to be exported there, and depreciates the goods already produced.

The second cause of the diminution of wealth is the reckless enjoyment on the part of the speculating communities before the crash comes. So in America before the great crisis of 1873 it is related that at one entertainment £800 was spent on the pastry alone (Bonamy Price, *Currency and Banking*, p. 89). And the extravagance extends to the lower classes who are tempted to excess by the sudden rise of wages, which makes their subsequent privations all the more acutely felt. There is delusive prosperity, a prosperity somewhat of the sort of those who are eating up their harvest without saving seed or preparing the ground for the next year. The actual crisis has a number of mercantile phenomena attached to it that do not at present concern us. In the main it is a settlement of who is to bear the previous loss; and the poor are naturally the chief sufferers. Thousands are thrown out of work through no fault of their own and the savings of years may have to be sacrificed to secure not comfort but bare existence. It has been said of the labouring poor of England in 1816 and 1825 and of America in 1837 and 1857: "All that man could do had been done to turn them shelterless and penniless into the street" (Horace White in *The Fortnightly Review*, June, 1876, p. 810). The acute distress in the Eastern States for several years after the crisis of 1873 can hardly yet be forgotten, or that in the East of London after the crisis of 1866. And then, besides the vast loss of wealth previous to a crisis, the state of things that follows it retards reproduction. For there is an immense loss of productive power from the elaborate mechanism of concerted labour getting out of order, and the break up consequently of so many personal relations, of buyer and of seller, lender and borrower, principal and agent, master and workmen. Men are in forced idleness while property lies unused because the personal arrangements are all dislocated that assigned such and such men to utilize such and such property; and irrational panic comes in addition to make concert more difficult.

Commercial crises have been treated with great penetration by Professor Bonamy Price in his book on *Currency and Banking* (especially pp. 128-145); also in his article in the *North British Review*, Jan. 1871, and in his *Lectures on Currency*, 1869, Appendix I. On those in agriculture Roscher gives some information, *Ackerbau*, § 137. I need hardly add that the notion of a crisis being a want of money, to be cured by the importation of gold or issue of paper, is a gross delusion. There is plenty of gold to be got; what is wanting is the means to pay for it. But it would be an equally

absurd instance of the fallacy *non causa pro causa* to say the poor workmen were suffering because they were too numerous. Their sufferings are immediately caused by the crisis, and the crisis is caused neither immediately nor remotely by any pressure of population on the soil.

D. (See § 307.)

THE MALTHUSIAN LEGEND.

In judging of Malthus the first thing is to reduce our feelings to the mediocrity of the object. He was not a hard-hearted villain and enemy of the poor; on the contrary he wished them well, was a well-meaning philanthropist. On the other hand he was no luminary of science, his book did not mark an epoch in the history of thought, and the frequent estimates of him as a great thinker (for example by Roscher, *Nationalökonomie*, § 242, 243) are among the most absurd of literary misjudgments. He was a third-rate economical writer, with some powers of observation and description, but with little originality and hardly any powers of reasoning. How absurdly he fails to prove his case of misery being due to over-population has already been noticed (§ 301, note p. 618), and other examples of his irrationality are pointed out in Mr. George's excellent criticisms (*Progress and Poverty*, Bk. II. Ch. I. and II.). What with ambiguous terms and prevailing prejudices he was involved in a network of error. Further, we must not think, because his doctrine is so thoroughly immoral in its principles and its consequences, that he is to be held responsible: his lack of knowledge and sense may serve him as an apology. But still I think he cannot be held wholly free from blame for his crass ignorance of Christian doctrine, his unblushing approval of Utilitarianism (*Essay on Population*, 6th edit. p. 16, note), his abhorrence of poverty (II. pp. 82, 298), and his extenuation of immorality (II. pp. 294, 295, 298). For he claimed to be a Christian; and though we make great allowances for heretical blindness, there must be a limit to our indulgence. As regards his title to fame, it rests chiefly on his being the foolish finder and proclaimer of the formula that population tends to increase at a *geometrical* ratio, while the means of subsistence can only be made to increase at fastest at an *arithmetical* ratio. No doubt Mill (*Polit. Econ.* Bk. II. Ch. XI. § 6) is right, that this formula is wholly superfluous to the argument; I have not mentioned it in the text, for it is an absurdity that has no defenders. But it is not superfluous to

the fame of Malthus; and Mill is a cruel friend, and quite mistaken into the bargain, in thinking he "laid no stress on this unlucky attempt to give numerical precision to things which do not admit of it." For he did; and thereby gained a notoriety that justifies the use of his name as a convenient peg on which to hang up one set of economical errors. His secondary title to fame was the notorious passage in the first edition of his work, modified in the second edition and afterwards expunged, on there being no vacant cover for the superfluous child at nature's mighty feast: she tells him to be gone, and will quickly execute her own orders (Book IV. Chapter VI.). This passage and that theory of the two ratios will perhaps keep the name of Malthus from oblivion; nothing else will.

E. (See § 308.)

THE DELUSION OF A WAGES FUND.

It is not necessary to enter on literary history and examine the recantation of Mill on the wages fund, and whether the recantation is adequate, or whether he has only followed Thornton out of the frying pan into the fire. (See Lujo Brentano, *Die Arbeitergilden der Gegenwart*, II. pp. 233-237; W. Dillon, *The Dismal Science*, 1882, pp. 38-44.) I will only cite a few passages that will help to clear our heads about wages. Cliffe Leslie writes as follows (*Land Systems*, pp. 40, 41): "No fallacy has more tended to hide the real condition of Ireland and the remedies it requires, than one into which writers of authority have fallen, that emigration must steadily raise wages in Ireland in proportion as it diminishes the number of labourers. The base of the fallacy is an imaginary 'aggregate wages fund,' the share of each labourer in which is supposed to become greater as the number sharing becomes smaller. But the bargain of wages is a transaction between the individual employer and his men; what that employer can give depends on his own means or profits, and not on the sum of the funds in his own or other people's possession; nor are his means augmented by the scarcity of labour. Were only one labourer left in the country, would he earn as much as all the former labourers put together? Clearly not, unless he did as much work, and worked for all employers at once; for how else could the money be forthcoming to pay him? So far are wages from being equal through Ireland, as the doctrine of an aggregate wage fund, shared by a smaller number of labourers, implies, that they vary from 5s. a week to 12s., and are highest where good labourers are most numerous, and on the side nearest England instead of America." And further on he says (*ibid.* p. 97): "... although emigration may force employers either to pay more for labour or to forego it, it cannot enable them to pay more for it as higher prices of produce will do; and, ... it may, on the contrary, compel or determine them to diminish their outlay upon it, ... to relinquish enterprises already on foot, to forsake tillage for

pasture, to emigrate themselves, and in various other ways to withdraw funds from the labour market [*i.e.* cause fewer servants to be employed in the house, or shop, or mill, or on the land, or at the mine, or fishery, or on the railways, or on board ship]. It may actually disable them from paying the same rate of wages as formerly, by withdrawing the strongest and most skilful hands from their employment; and again, in place of being a cause in the rise of the rate of wages, it may be the consequence of a fall. These are . . . cases of actual occurrence in Ireland." And he proves it.—The long reign of the delusion about a wage fund (scarcely yet ended in England, except in its crudest form) is an example of how vain are reasoning and facts against the enunciations of pseudo-science. Thus Ludlow was quite right but quite ineffectual when he protested thirty years ago against the assumption of economists that all the money actually offered for labour was all that could be offered, whereas there was a human element which stretched the demand by liberality or contracted it by parsimony and beating down. He pointed out how nominal wages in almost every trade varied slightly from house to house, while the "real rate as determined by the amount of labour required, the enforcing or non-enforcing of fines, abatements, etc." varied to an infinite degree. And he concluded most unpalatably and *unzeitgemäss*, that the demand of capital for labour was no arbitrary fatal quantity, but was subject to human wills, varied with human affections, and was responsible to human duties. (*Christian Socialism*, 1851, pp. 44 *seq.*)

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